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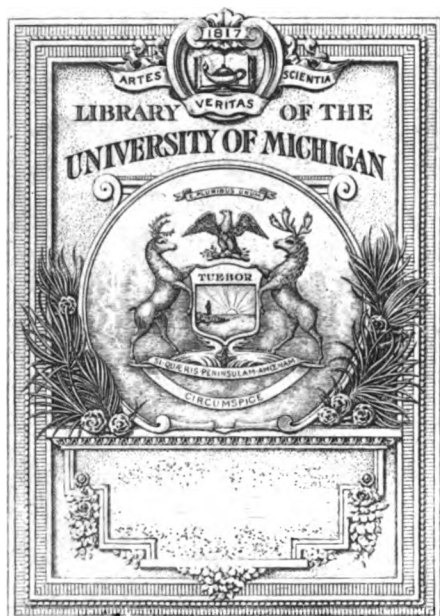
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OF AMERICAN COLLEGES**
Bulletin

VOLUME VII

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OF

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**ASSOCIATION OF AMERICAN COLLEGES
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The Preliminary Report of the Association Commission on the Organization of the College Curriculum

Edited by

Robert L. Kelly

Executive Secretary of the Association

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THE COMMISSION ON THE ORGANIZATION OF THE COLLEGE CURRICULUM

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DR. CLYDE FURST, Carnegie Foundation for the Advancement of Teaching.

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INTRODUCTORY STATEMENT

By PRESIDENT LOUGH.

That I make this brief preliminary statement is authorized by the entire Commission, but the responsibility for what I say is my own. The responsibility is not a serious one, for I am satisfied that I state what is manifest to everyone.

My purpose is to state as briefly and as definitely as conditions permit what seem to me the main considerations with which we must reckon as we approach the problem of the reorganization of the College Curriculum.

Is the demand sufficient and does it come from sources worthy to justify any serious attempt to reorganize?

It seems to me that the most serious demand, the most intelligent demand, comes from the educators themselves. That need not be discussed. The demand comes, as we know, perhaps better than any other class of citizens, from the interest and the interests of students. It comes from a variety of interests looking for prepared workmen. This variety includes every phase of activity. We have been brought face to face in various ways with not only the demand but the severe criticism that is embodied in this demand. Probably the great majority of us will grant that while all that is demanded from these sources cannot be approved, there is much that is just and compelling consideration. In any effort to comply with this demand, edu-

cators will have serious regard for principles and values as discovered and tested in educational experience. In this experience I would include the agonies of the present.

Our comprehensive aim is the cultured and efficient citizen. Neither without the other is adequate. Culture that does not issue in efficiency is fragmentary and lacking in vitality, and efficiency that does not rest upon culture is defective, mechanical, lacking dynamic. If we develop the student in culture, we must direct him in reliving the experience of mankind in which excellence has been discovered and the power to perceive and relish has been developed. To make him efficient we must use the same tools and agencies with which he is developed in culture. He is cultured as he has delightful insight into nature. He is efficient as he can make this same nature do his bidding, serve his interests. Is not the whole aim of education the cultured and efficient citizen? This is held to include taste, discipline, practical or useful knowledge and skill, extensive range of interest and interests, and the adjustment of culture and efficiency to local social and industrial conditions. Beyond a doubt many of our colleges flagrantly neglect this demand of social and industrial conditions. We must give more heed to it, but in doing so we must retain the good of the old curriculum.

Our experience with the elective system has raised a question which we must seriously consider in reorganization of the curriculum. What weight are we to give to students' desires and efforts to avoid solid work as compared with educational standards? I know of but one reply. We must seriously weigh and carefully appraise the value of the students' desires. Have we, up to date, made adequate provision to protect students against their own ignorance and weakness? Everybody knows we have not. So far provision is fragmentary and actually almost if not quite non-existent in many colleges. A beginning has been made in vocational guidance. This, however, is by no means universal. Should we not change the phrase to cultural and vocational guidance? Certainly neither may be neglected

with impunity. This means, necessarily, provision for diagnosis and counsel in much improved form as compared with anything now being done. Experience has demonstrated that group requirements and model courses may be made distinctly serviceable.

The condition in which freshmen come to the college has forced upon us the consideration of another troublesome question. How shall we provide for the freshman prepared for advanced courses in certain departments and for the freshman not prepared. I have in mind more especially the conditions we must reckon with in the West and Middle West. We must receive as unconditional freshmen those who come from the high schools with fifteen units of accredited work. They are coming to college without having had certain courses in language, in mathematics, and very often in science. When they come to the college they often decide that they should have some of these courses. If they get them they must get them as college courses. For one, I believe that we cannot go back to the old conditions. We must face and try to solve this problem as a new problem that is forced upon us. So I ask: To what extent can we continue to hold to rigid entrance requirements? I have already expressed my own view. We cannot do it, although we can hold to much of value in the old requirements. Are we not obliged to consider the problem of offering beginning courses of college dignity and strength? If this is done, it should be as prominently advertised as other provisions.

Would it not be well for this association to work out and strongly commend something definite and wholesome on the vexed problem of the relation of quality and quantity in offering and execution? We all most heartily assent to such utterances as we heard from President Angell last night. Where are the embarrassments and how can we successfully meet them? Are they not in part due to our national blunder of appreciating quantity above quality? Larger and materially stronger institutions must take large responsibility for the tendency of the small college to attempt quantity at the expense of quality. I refer to the

contempt often expressed for the small college because of the limited curriculum offered. We need constant emphasis upon the wisdom of limited offerings well executed. We must aim at quality in the efficient college before quantity.

In attempting to solve the problem just referred to, we must have a definite reply to another question. What principle is to guide the small college of limited means in its offerings as compared with the large college of extensive means? There can be no difference of opinion as to the answer. What we offer must be done just as well as it can be done in any larger and more extensively equipped institution. Our efforts should be as stated so forcibly by President Angell last evening, to do what we offer to do with fine quality rather than to yield to the constant temptation for the showing in quantity, to offer what we know we cannot do.

Should a small college like my own, Baker University, having an enrollment of from 450 to 500 students and a faculty of 30 full time teachers, offer graduate courses? Should it yield to the constant appeal for correspondence work? While we have a faculty which in ability could give fine graduate work, for many of them have come from positions in the larger institutions where they did it, all their time, and all their energy are consumed in doing the undergraduate work. We would be happy if we had more in our faculty to do the undergraduate work. We take the position that no graduate work should be offered, and certainly no attempt at correspondence should be made. We inform our students, those that ask for either graduate or correspondence courses, that they must go elsewhere. A strong utterance in this matter of quality as over against quantity, definitely made by this Association, would wonderfully help all institutions that are eager to meet in a fair and proper way this condition.

COLLEGE ENTRANCE REQUIREMENTS

By DR. FURST.

After such a handsome introduction from the President, I wonder if you will indulge me with a postscript which has nothing whatever to do with the subject which has been assigned to me for this morning?

Two years ago it was my privilege to draw up for this Association a rather elaborate memorandum concerning the history and development and probable outcome of the problem of providing retiring allowances for teachers in universities and colleges. That was printed in the Bulletin of the Association and distributed in anticipation of the discussion of the subject at your meeting two years ago, following an address by Dr. Pritchett, the President of the Carnegie Foundation.

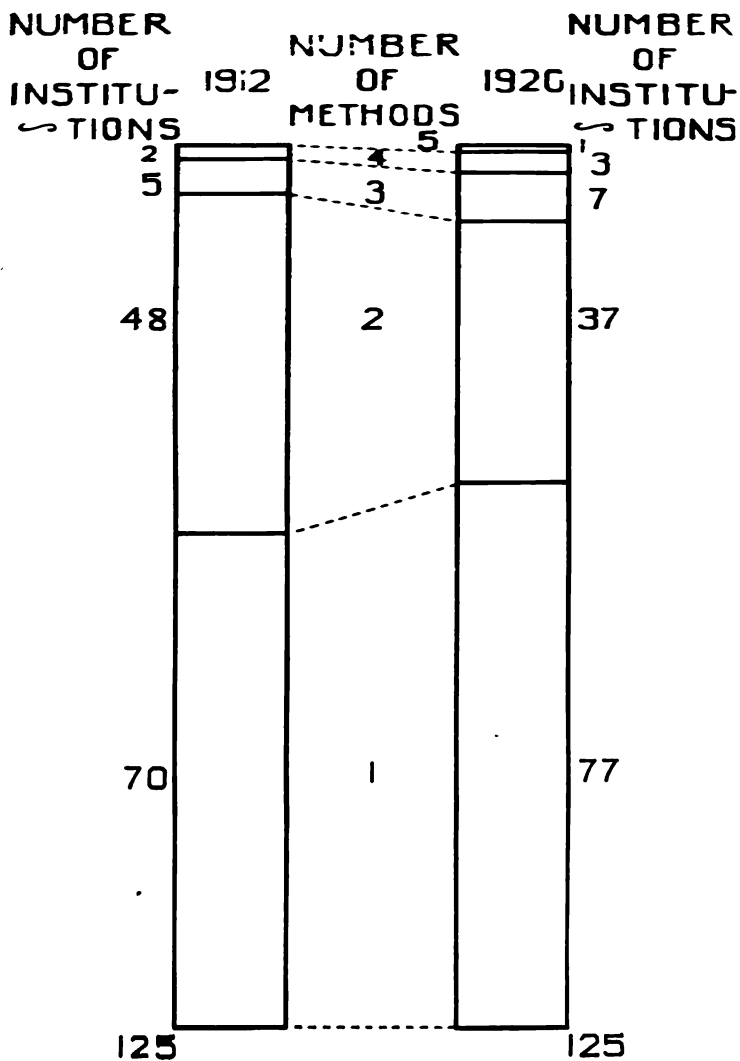
Those who were interested in that Bulletin and that discussion will, I think, be interested to know that the Teachers Insurance and Annuity Association which was then formed has now been in operation for two full years. Its work is meeting an acceptance that indicates its adjustment to the problem. Having done twice as much work during 1920 as it did during 1919, the Association has now written 1,200 contracts representing about eleven million dollars. One-third of these represent about three and a half million dollars of life insurance, especially devised for teachers in forms that are provided by no commercial company; the other two-thirds represent annuities totalling over \$600,000 a year. All of the contracts of the Association are written at cost, without charge for overhead expenses.

These contracts have been written in 224 institutions, and 46 institutions have adopted contractual, contributory annuities for all of their teachers who are interested. A dozen or more institutions in addition have adopted and approved the principle and are working on the details.

I am asked both by the Carnegie Foundation and by the Teachers Insurance and Annuity Association to say that both organizations will be very glad to give any further

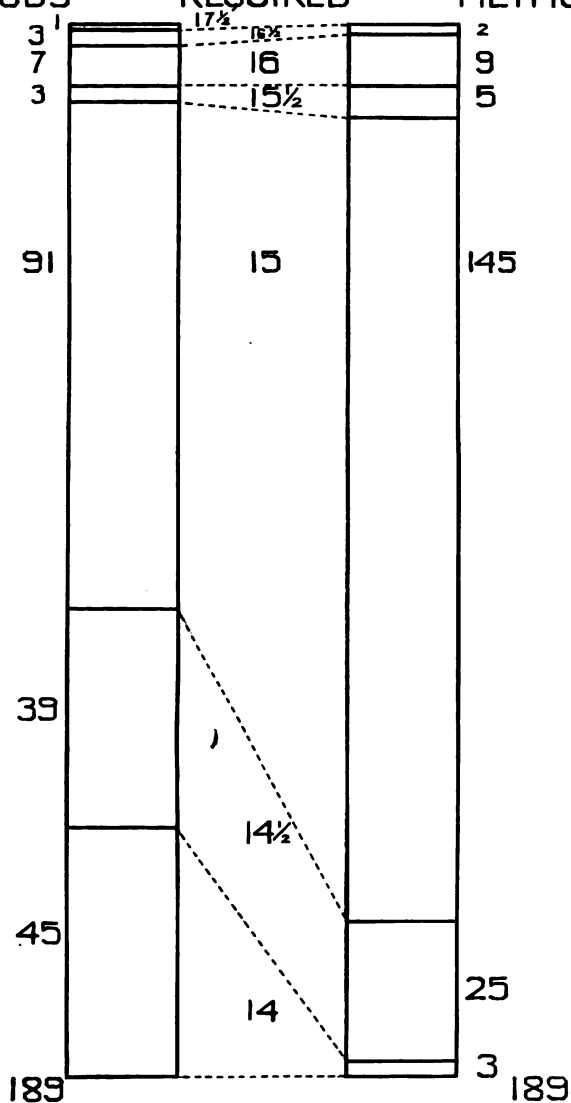
(See pages 22-31.)

NUMBER OF METHODS - I OF ADMISSION.



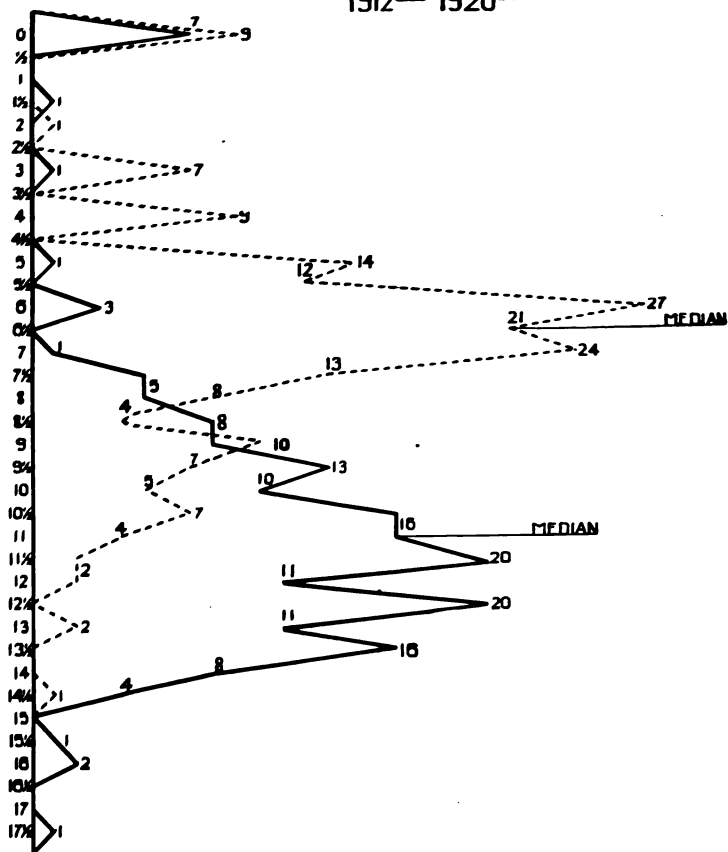
NUMBER OF UNITS REQUIRED-II

NUMBER OF METHODS 1912 NUMBER OF UNITS REQUIRED 1920 NUMBER OF METHODS



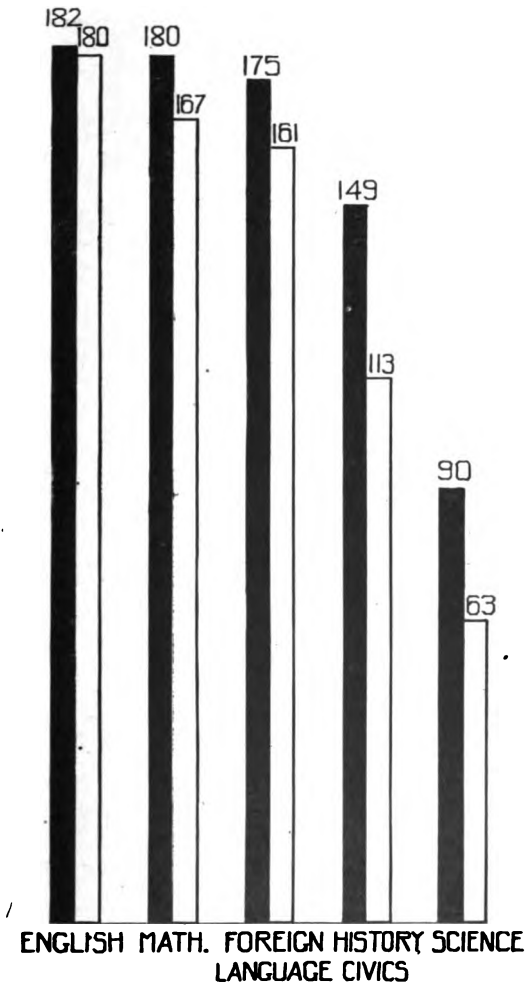
UNITS PRESCRIBED.-III

1912—1920---



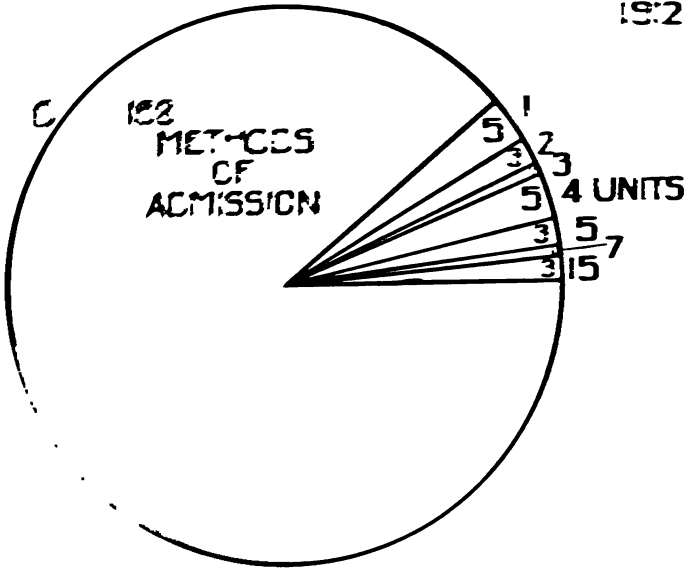
AMERICAN COLLEGES

NUMBER OF PRESCRIPTIONS IN VARIOUS GROUPS
IN 1912 ■ - IN 1920 □ IV

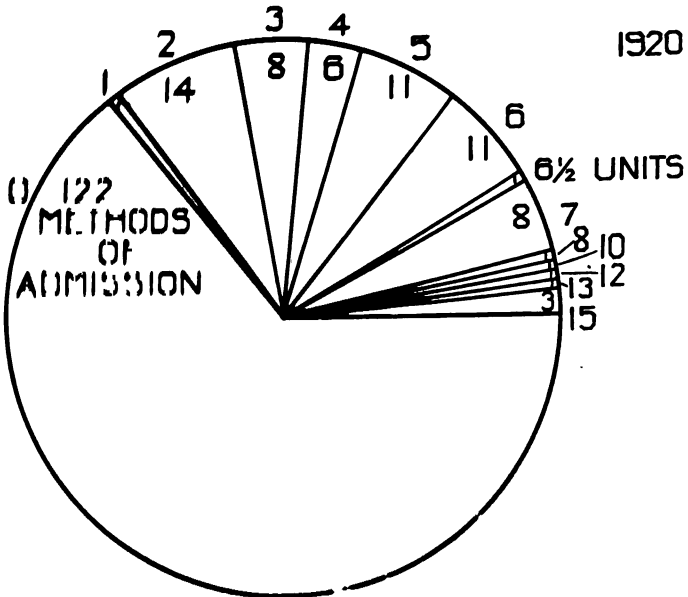


NUMBER OF FREE UNITS-V

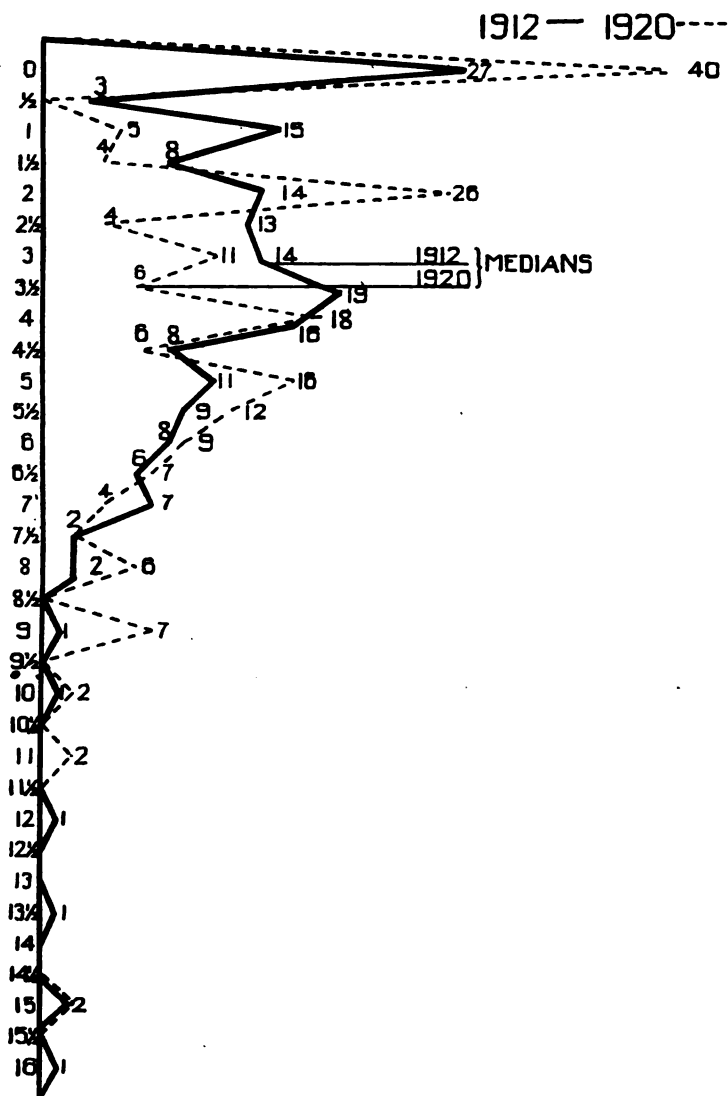
1912



1920



ELECTIVE UNITS.-VI



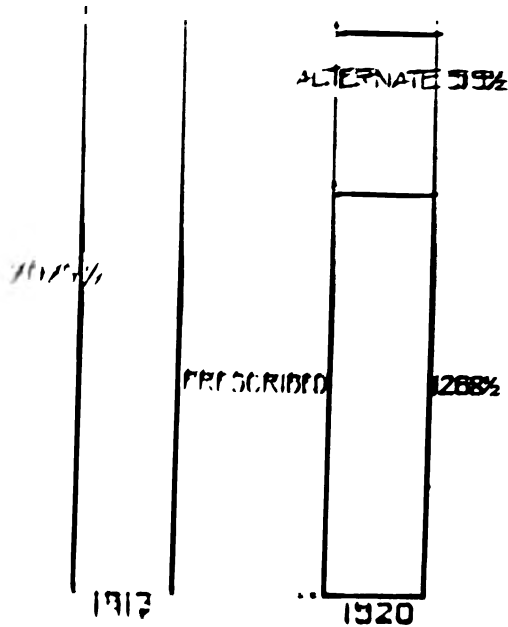
REGULATION OF

CHANGE IN WEIGHT OF ALUMINUM

1917 1920
345

1917

1920



ALTERNATE PRESCRIPTIONS: VIII

GK 1 LAT 2 MATH 3 PHYSICS 37 CHEM 36 BOT 11 ZOO 11 PHYSIOG 6 PHYSIO 6 GEOL 3	GREEK 61		GREEK 65	LAT. 46	GK 4	
	LATIN 46					
	FRENCH 82					
	GERMAN 82					
	SPANISH 77		LATIN 16			
			FRENCH 48			
			GERMAN 48			
			SPANISH 39		FR 10	
			ITALIAN 8		GER 10	
			MATH 10		SPAN 10	
ITAL 6		3				
1		2	UNITS			
		3				
		4				

COMPREHENSIVE EXAMINATIONS-II

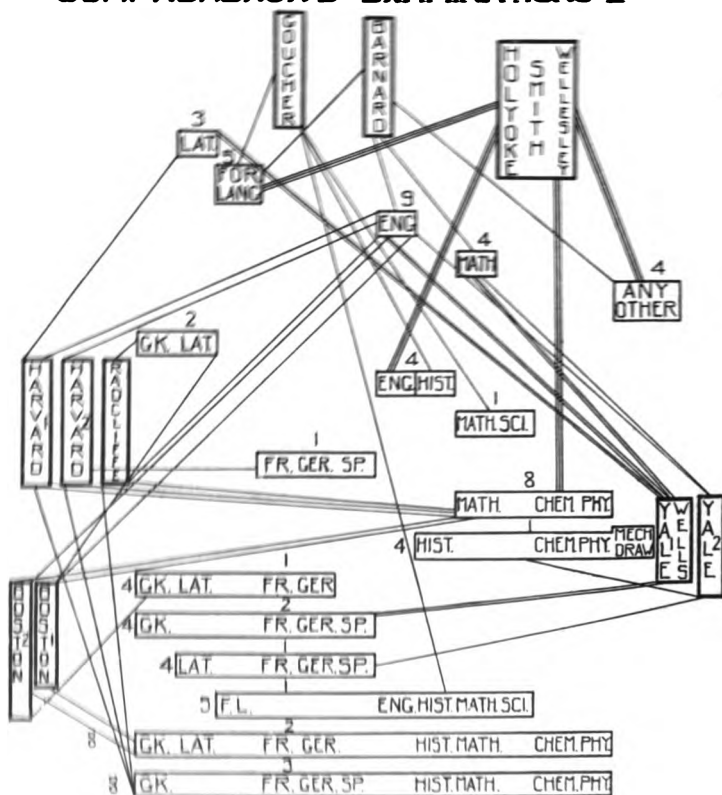


TABLE A
REQUIREMENTS FOR ADMISSION IN 1912 AND 1920

No. of Units	Prescribed				Elective				Free				Alternative Prescribed				Total			
	1912		1920		1912		1920		1912		1920		1912		1920		1912		1920	
	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units	Meth- ods	Units
0	7	0	9	0	27	0	40	0	168	0	122	0	0	0	33	0	202	0	204	0
1½	0	0	0	0	3	1½	0	0	0	0	0	0	0	0	0	0	3	1½	0	0
1	0	0	0	0	15	15	5	5	5	5	1	1	0	0	2	2	20	20	8	8
1½	1	1½	0	0	8	12	4	6	0	0	0	0	0	0	0	0	9	13½	4	6
2	0	0	1	2	14	28	26	52	3	6	14	28	0	0	53	106	17	34	94	188
2½	0	0	0	0	13	32½	4	10	0	0	0	0	0	0	1	2½	13	32½	5	12½
3	1	3	7	21	14	42	11	33	1	3	8	24	0	0	32	96	16	48	58	144
3½	0	0	0	0	19	66½	6	21	0	0	0	0	0	0	0	0	19	66½	6	21
4	0	0	0	0	16	64	18	72	5	20	6	24	0	0	36	144	21	84	69	276
4½	0	0	0	0	11	55	16	80	3	15	11	55	0	0	23	115	15	75	64	320
5	1	5	14	70	11	55	16	80	3	15	11	55	0	0	23	115	15	75	64	320
5½	0	0	12	66	9	49½	12	66	0	0	0	0	0	0	0	0	9	49½	24	132
6	3	18	27	162	8	48	9	54	0	0	11	66	0	0	9	54	11	66	56	336
6½	0	0	21	136½	6	39	7	45½	0	0	1	6½	0	0	0	0	6	39	29	188½
7	1	7	24	168	7	49	4	28	1	7	8	56	0	0	0	0	9	63	36	252
7½	5	37½	13	97½	2	15	2	15	0	0	0	0	0	0	0	0	7	52½	15	112½
8	5	40	64	64	2	16	6	48	0	0	1	8	0	0	0	0	7	56	15	120
8½	8	68	4	34	0	0	0	0	0	0	0	0	0	0	0	0	8	68	4	34
9	8	72	10	90	1	9	7	63	0	0	0	0	0	0	0	0	9	81	17	153
9½	13	123½	7	66½	0	0	0	0	0	0	0	0	0	0	0	0	13	123½	7	66½
10	10	100	5	50	1	10	2	20	0	0	1	10	0	0	0	0	11	110	8	80
10½	16	168	7	73½	0	0	0	0	0	0	0	0	0	0	0	0	16	168	7	73½
11	16	176	4	44	0	0	2	22	0	0	0	0	0	0	0	0	16	176	6	66
11½	20	230	2	23	0	0	0	0	0	0	0	0	0	0	0	0	20	230	2	23
12	11	132	2	24	1	12	0	0	0	0	1	12	0	0	0	0	12	144	3	36
12½	20	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	250	0	0
13	11	143	2	26	0	0	0	0	0	0	1	13	0	0	0	0	11	143	3	39
13½	16	216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	229½	0	0
14	8	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	112	0	0
14½	4	58	1	14½	0	0	0	0	0	0	0	0	0	0	0	0	4	58	1	14½
15	0	0	0	0	2	30	2	30	3	45	3	45	0	0	0	0	5	75	5	75
15½	1	15½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15½	0	0
16	2	32	0	0	1	16	0	0	0	0	0	0	0	0	0	0	3	48	0	0
16½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17½	1	17½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17½	0	0
Total	189	2025½	189	1268½	189	659½	189	697½	189	101	189	348½	0	0	189	519½	567	2786	766	2834

TABLE B
SUBJECTS PRESCRIBED IN 1912, 1920

Number of Units	English		Mathe- matics		Foreign Language		History		Science	
	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920
$\frac{1}{2}$	0	0	0	0	0	0	3	2	7	0
1	0	0	0	1	1	0	118	101	56	50
$1\frac{1}{2}$	1	0	0	0	0	0	5	2	5	0
2	7	8	34	52	35	62	23	8	22	12
$2\frac{1}{2}$	0	3	106	70	1	0	0	0	0	0
3	170	168	35	41	19	23	0	0	0	1
$3\frac{1}{2}$	0	0	2	1	2	0	0	0	0	0
4	4	1	3	2	49	34	0	0	0	0
$4\frac{1}{2}$	0	0	0	0	1	0	0	0	0	0
5	0	0	0	0	15	17	0	0	0	0
$5\frac{1}{2}$	0	0	0	0	3	0	0	0	0	0
6	0	0	0	0	29	16	0	0	0	0
$6\frac{1}{2}$	0	0	0	0	2	0	0	0	0	0
7	0	0	0	0	16	7	0	0	0	0
$7\frac{1}{2}$	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	1	2	0	0	0	0
$8\frac{1}{2}$	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
$9\frac{1}{2}$	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	1	0	0	0	0	0
Totals	182	180	180	167	175	161	149	113	90	63

TABLE D
ALTERNATE PRESCRIPTIONS, 1920

Subjects	Number of Units							Total
	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	
French.....	0	0	0	82	0	48	10	140
German.....	0	0	0	82	0	48	10	140
Greek.....	0	1	0	61	0	65	4	131
Spanish.....	0	0	0	77	0	39	10	126
Latin.....	0	2	0	46	0	16	46	110
Physics.....	0	37	0	0	0	0	0	37
Chemistry.....	0	36	0	0	0	0	0	36
History.....	1	7	1	10	1	2	0	22
Mathematics.....	0	5	1	3	0	10	0	19
Italian.....	0	0	0	6	0	8	0	14
Botany.....	1	11	0	0	0	0	0	12
Zoology.....	1	11	0	0	0	0	0	12
English.....	0	3	0	0	0	5	0	8
Physiography.....	1	6	0	0	0	0	0	7
Physiology.....	2	4	0	0	0	0	0	6
Geology.....	1	3	0	0	0	0	0	4
Astronomy.....	2	0	0	0	0	0	0	2
TOTALS (17 Subjects)	9	126	2	367	1	241	80	826

TABLE C
SUBJECTS ELECTIVE IN 1912 AND 1920

Number of Units	¾		1		1½		2		2½		3		3½		4		4½		5		5½		Total	
	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920	1912	1920
English.....	0	0	0	52	0	0	9	0	0	109	0	0	0	80	5	0	0	0	0	0	0	0	189	66
History, Civics.....	0	28	6	27	5	1	44	32	11	3	34	36	17	3	37	38	10	2	6	5	19	0	189	175
Mathematics.....	0	12	0	33	0	45	1	24	16	8	29	4	50	2	67	5	8	1	0	1	0	0	189	135
Latin.....	0	0	1	10	0	0	2	20	1	0	4	2	1	0	152	86	1	0	26	1	0	0	188	119
French.....	0	0	1	1	1	0	33	25	0	0	93	62	0	0	54	46	0	0	2	0	0	0	184	134
German.....	0	0	1	1	1	0	24	28	0	0	92	62	0	0	64	46	0	0	2	0	0	0	184	137
Physics.....	3	1	152	132	1	1	25	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	142
Greek.....	0	0	3	3	0	0	22	26	2	0	114	88	0	0	36	7	0	0	2	0	0	0	179	124
Chemistry.....	3	1	148	133	1	1	26	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178	143
Botany.....	22	8	120	99	0	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164	111
Zoology.....	18	7	116	85	0	1	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156	95
Physiography.....	32	10	101	91	0	1	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153	105
Physiology.....	70	34	47	33	0	0	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138	70
Drawing.....	19	4	67	41	5	4	12	19	0	0	0	3	0	0	23	3	0	0	0	0	0	0	126	74
Spanish.....	0	0	5	1	2	0	69	55	0	0	11	39	0	0	23	18	0	0	0	0	0	0	110	113
Biology.....	0	1	14	59	70	3	0	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	104	65
Agriculture.....	17	4	23	15	0	0	7	10	0	0	21	7	1	0	2	10	0	0	0	0	0	0	71	46
Business.....	18	4	10	8	4	0	9	13	0	2	26	4	2	4	1	12	0	1	0	3	0	0	71	51
Economics.....	36	21	18	12	0	0	0	0	0	0	9	0	1	0	0	0	0	0	0	0	0	0	64	33
Home Economics.....	11	0	17	9	0	0	12	20	0	0	20	4	0	0	3	8	0	0	0	0	0	0	63	41
Geology.....	18	12	25	13	0	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	27
Astronomy.....	20	4	25	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	8
General Science.....	11	4	28	29	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	35
Education.....	5	2	7	1	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	13	6
Italian.....	0	0	0	5	0	0	8	10	0	0	4	3	0	0	0	0	0	0	0	0	0	0	10	6
Bible.....	2	0	8	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	8
Psychology.....	1	5	8	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Nature Study.....	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Surveying.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Danish.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Icelandic.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Scandinavian.....	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	1	3
Swedish.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Norwegian.....	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
Art.....	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hebrew.....	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Argument & Debat.....	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Polish.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Vocational Subjects.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

information to anyone who is interested, either by correspondence, or, by conference, in their offices, in the Guaranty Trust Company Building, at 44th Street and Fifth Avenue, where it might be interesting to you to see the machinery in actual operation.

The part of the work of the Commission on the College Curriculum that was assigned to me was a statement of the actual situation and the apparent tendencies in the field of college entrance requirements.

You will recall the very comprehensive study of that subject which was published in 1913 by Mr. Clarence Kingsley, now connected with the State Board of Education of Massachusetts, in which he studied the entrance requirements of 24 colleges of liberal arts, and presented the tendencies that seemed to be apparent as represented by those requirements.*

Quite recently, when the memoranda that I shall present to you were nearly finished, there came from the Bureau of Education a completed study that has long been in progress and that may possibly have not yet reached you - Dr. Walton C. John's Bulletin on Requirements for the Bachelor's Degree.** This represents the situation in 1916-17. Because of that fact, and because of its coming when our own study had been nearly completed, only incidental reference to this bulletin, as monumental as it is, is made here. We hope later to relate the facts contained there to the other studies that we have made.

Meanwhile, for purposes of comparison, we adopted a list of institutions, the entrance requirements of which could be studied both as they were in the past and as they are at present. It proved convenient for a number of reasons to use the 125 institutions that were on the approved list of the Association of American Universities for 1918, not including the institutions on that list that give only technical degrees. The data for the entrance requirements of these

*United States Bureau of Education, Bulletin, 1913, No. 7.

**United States Bureau of Education, Bulletin, 1920. No. 7.

institutions as they were in 1912 have been taken from Mr. Kingsley's Bulletin. For 1920 a group of members of the staff of the Carnegie Foundation made elaborate tables, giving all of the essential details.***

There are a hundred aspects of entrance requirements, and it was possible to study in detail only perhaps one dozen of them, and these are presented with the hope of some questions afterwards, either with regard to the significance of these details, or with regard to the significance of other factors that should be studied.

Chart I illustrates the number of methods of admission used by the 125 institutions. Many institutions grant two, three, four, or more degrees. Sometimes one requirement for entrance admits to candidacy for all degrees. Again, the requirements for admission vary with the degrees. In 1912 it was already the custom of a predominant number of institutions—70 out of 125—to have only one method or only one kind of requirement for admission to all of their degrees, no matter how many those degrees might be. This tendency became somewhat more striking in 1921, the number increasing from 70 to 77.

There was in 1912, and there still is in 1920, a small group of institutions that show a tendency toward differentiation. There were seven that had three or four methods of admission in 1912, and there are now eleven that have three or four or five methods. The tendency to differentiation is thus in a small and rather active minority, but the general tendency was then toward one method only, and now is even more strongly toward one method only. The number having more than two methods increased from seven to eleven, the number having two methods decreased

***The tables, few of which are presented here, were the work chiefly of Miss Margaret Herod. The computations were checked and a number of the charts were devised by Miss Edythe Maslen. Mr. Robert Reaser devised other of the charts and drew them all. It was my own fortune to suggest the plan of the study and of its various parts, and to summarize its particulars and general conclusions.

from 42 in 1912 and the number having one method only has increased from 21 to 37.

There is an even more striking tendency toward uniformity in the number of units that are required for entrance to degrees in these 125 institutions. Chart II shows that in 1912 out of the 149 methods of admission which these 125 institutions had, 51, or not quite one-half, required fifteen units for admission. Curiously enough, the same 125 institutions in 1920 have again 149 methods of admission. In 1920, however, 145, or more than three-quarters of the methods of admission, require fifteen units.

During this period then, the group requiring fifteen units for admission has increased from nearly one-half to more than three-fourths of the whole. The tendency to have fourteen units has almost vanished, being reduced from 45 methods in 1912 to three in 1920. The tendency to have fourteen and a half units has similarly declined from 39 to 27.

The small group of institutions that was noticed in Chart I as retaining differentiated requirements for the different degrees appears in Chart II as requiring fifteen and a half, sixteen, sixteen and a half, and seventeen and a half units for admission. There were fourteen such methods of admission in 1912, and sixteen in 1920. The general tendency, however, to have fifteen units has become almost universal.

With regard to the distribution of these units, among prescriptions, electives, and entirely free choice on the part of the student, Table A and Chart III display another interesting tendency of which most of us have been aware. The solid black lines upon Chart III represent, for 1912, the number of units in the various admission requirements, which were definitely prescribed as to subject,—that is to say, requiring specifically so many units in history, English, chemistry, or some other particular subject. The dotted line represents the same factors in 1920. The lines indicating the means denote that in 1912 it was the general custom that about eleven units should be taken in specified sub-

jects. In 1920 it was the practice to prescribe only about six and one-half of the fifteen units that were generally required for admission. In other words, the number of units that are ordinarily prescribed as to subject has decreased from eleven to six and a half, a decrease of nearly fifty per cent.

Table B and Chart IV indicate that the change has occurred in all subjects. The relative importance given to the various subjects is the same in 1912 as in 1920. Thus English, which was prescribed 182 times in 1912, is now prescribed 180 times. The most popular subject, therefore, has shown only a very slight decrease in the number of prescriptions. Mathematics shows a decline from 180 prescriptions in 1912 to 167 in 1920. All of the separate foreign languages, gathered here into one group, declined in prescriptions from 175 to 161. History and civics declined from 149 to 113. All of the prescriptions in the separate sciences, gathered here into one group, declined from 90 to 63. In general, the subject that was and is most popular among the prescriptions, English, has decreased the least,—in only two instances. The subject that was and still is least popular among the prescriptions, the science group, has decreased the most, almost one-third.

DR. HARKER: A number of colleges prescribe definitely certain units, six, seven, or eight, in certain definite subjects. Then they say another three or four must be selected from a very few, making altogether, either in wholly prescribed or partially prescribed, some ten or eleven, and only a very few will be general. Has that been taken into account?

DR. FURST: Precisely. It will be shown later, but we may speak of it now. In making this study, we encountered a surprise with which I had hoped to surprise you, but I see that it has been anticipated. It is that the tendency that was observed in 1912 away from almost complete prescription of entrance subjects toward almost complete freedom of choice in entrance subjects, has been checked by the introduction of a practically new kind of requirement which,

for convenience, would have to be called something like alternate prescription or limited elective. That is, instead of saying, "You must have Latin, and mathematics, and physics, and chemistry," a large number of methods of admission, as will be illustrated later on, say, "You must take so many points in English or history; French, German, or Spanish; chemistry, physics, botany, or zoology; and so on. These we have called, for want of a better name, alternate prescriptions. Dr. John's study, which has been referred to, divides all admission requirements into prescribed or elective units. Mr. Kingsley added a third grouping, free units. We have felt the need of a fourth grouping, and use prescribed, elective, free, and alternate units as classifications.

In response to an enquiry concerning vocational subjects, it may be said that there has not been to any great extent an increase among the prescribed alternatives of vocational subjects. Those are apt to be allowed among the units that may be chosen with complete freedom, which, as we shall see later, still make up a part of the requirement for admission, although not so large a part as in 1912.

In response to an enquiry concerning the list of institutions from which these data have been drawn, it may be said that these tables and charts represent the same 125 institutions in 1912 and 1920, the 125 universities and colleges that were on the list of the Association of American Universities for 1918. These 125 institutions happen to have 189 methods of admission both in 1912 and in 1920, but this is a mere accident. The list of the Association of American Universities being a representative list and the Association of American Colleges being a representative body, the data presented would fairly represent the institutions belonging to the College Association. The University list does include state universities, where there is perhaps the maximum of freedom with regard to admissions. It does not, on the other hand, include some of the smaller colleges, where perhaps conservatism would be rather the rule. In general, however, the list and the data from the institutions upon it may

be considered generally representative of the situation and tendencies among our influential institutions.

Table A, once more, and Chart V illustrate the situation with regard to the entire freedom on the part of the student to offer for college entrance any subjects that he has taken in high school, no matter what they may be. The number of methods of admission that allowed some absolute freedom in 1912 was exactly one-ninth of the whole number. In 1920 this number increased to more than one-third of the whole, thus allowing absolute freedom in a certain number of units, saying to the student, "After you have satisfied our other requirements, you may offer anything you have had in your high school, no matter what it is."

This increase has been largely in the group of requirements allowing from five to fifteen units of entire freedom. Few allowed so much in 1912, now a considerable number do so. Eleven requirements allow five units of absolute freedom, eleven requirements allow six units, one allows six and one-half, eight allow seven, one each allows eight, ten, twelve, and thirteen, and three allow fifteen units of absolute freedom. Institutions that allow any entire freedom thus tend to allow a good deal.

At each end of the requirement for admission, therefore, we have a tendency towards relaxation and flexibility. The number of units representing subjects actually prescribed has decreased; the number of units representing subjects that are absolutely free has increased.

Tables A and C and Chart VI illustrate what was to us an unexpected change in the situation with regard to elective units; that is, the number of units that a college allows to be chosen at will from a considerable list of subjects, often a score or more. The number of methods allowing electives has decreased between 1912 and 1920. In 1912 there were 27 methods of admission that allowed no such electives. There are now 40 that allow no such electives. In general there has been no very great change, but such change as there is has been in the direction of a decrease,

the place formally occupied by electives having been taken by alternate prescriptions or limited electives.

Table A and Chart VII display the situation as a whole. The 125 institutions in 1912 taken together demanded units amounting to 2,786; that is, the number of methods of admission that an institution had, multiplied by the number of units in each particular method, and all of them added together. In 1920 the same institutions required 2,834 units. The increase is due quite largely to the general adoption of fifteen units for admission rather than a smaller number. The number of absolutely prescribed units has decreased from $2,025\frac{1}{2}$ to $1,268\frac{1}{2}$. The number of absolutely free units has increased from 101 to a total of $348\frac{1}{2}$. The number of methods of admission allowing electives having decreased, the total number of elective units has increased but slightly, from $659\frac{1}{2}$ to $697\frac{1}{2}$. At the same time the new feature of alternate prescriptions has entered, and now accounts for $519\frac{1}{2}$ units. This change is not only unexpected and interesting, but it would seem at first and after somewhat detailed study a salutary tendency. It allows considerable freedom to the secondary school and to the student, which is desirable, by giving the student a larger range than did the absolute prescriptions. At the same time it does not depart so much from any standards that the college may have, as does allowing absolute freedom in the choice of subject. The change appears to meet both kinds of pressure upon the complicated problem of admission requirements. It continues to hold to certain standards on the part of the college, while at the same time it provides an amount of flexibility in entrance which is desirable for the high school.

Table D and Chart VIII show the alternate prescriptions as they arrange themselves among subjects and numbers of units. The foreign languages are the subjects most emphasized; two or three units the favorite quantities.

It is impossible, because of the detail, to illustrate the various interrelations of these alternate prescriptions for all of the institutions. A score of diagrams were prepared for

the purpose, but no one of them was sufficiently simple for presentation on a screen or on the printed page. The general situation, however, is well illustrated by the comprehensive examinations that are now given in ten institutions, three of them having two kinds of comprehensive examinations.

These comprehensive examinations are illustrative of alternate prescriptions even in institutions that do not use examinations for entrance, because they might require the same list of subjects in the same way, to be presented by means of certificates. Ordinarily the comprehensive examination represents about eight or nine of the units that are required for admission, the whole record being represented by certificates and this limited portion being selected for test by examination. The comprehensive examination is divided into only four parts, so that the student has to take only four instead of a dozen or more tests and may select what he does take with a considerable amount of freedom.

That, of course, is an increase in freedom, and yet an increase in freedom that may be guided by the institutions so that their belief as to what is important shall not suffer.

In these comprehensive examinations the subjects are presented in several ways. An examination may be restricted entirely to one subject, or the student may choose between two subjects, or one of three, or four, or five, or even eight.

Chart IX, illustrating these comprehensive examinations, in the ten institutions that use them, is probably not clear at first glance. It will be found, however, to indicate a number of factors, and their interrelations. Reading the chart from top to bottom, it is striking, for example, to see how much emphasis is given to the field of foreign languages, and next to mathematics and science. Comparatively less emphasis than might be expected is given to English, and very little indeed to history.

Three times Latin is a subject by itself, twice it alternates with Greek. It is found four times in a group of four subjects and five times in a group of eight subjects.

English must be offered as a single subject nine times.

Four times the student is allowed to offer either English or history; once he may take English or foreign language, or history, or mathematics, or science.

With regard to the grouping of the subjects, reading the chart from left to right shows that the subjects which appear as occupying each by itself one-fourth of the comprehensive examination, are Latin, foreign languages as a group, English, mathematics, and any other subject; Latin occurring by itself three times, foreign languages five times, English nine, mathematics four, and any other subject four times. In groups of two alternate subjects we have Greek or Latin, English or history, mathematics or science. In groups of three there are French or German or Spanish; mathematics or chemistry or physics. In groups of four there are history or chemistry or physics or mechanical drawing; Greek or Latin or French or German; Greek or French or German or Spanish; Latin or French or German or Spanish. One group of five and two groups of eight follow.

The colleges arrange these possibilities in a very interesting way.

Mt. Holyoke, Smith, and Wellesley together show a requirement that one of the four parts of the comprehensive examinations be in some foreign language, one in English or history, one in either mathematics or chemistry or physics, and one in any other subject that may be chosen. The arrangement at Goucher College is even simpler, while Barnard College has the simplest system of the group. It requires a foreign language, English, mathematics, and other subject:

Wells College and the first of the two methods offered are identical in requiring mathematics, English, and Greek or French or German or Spanish, a group of languages where Latin is not included, it having been included as a single subject.

Harvard, Radcliffe, and Boston University have the elaborate and hence the most flexible requirements.

They, in concluding, that in continuing our study

we shall be happy to receive questions concerning any matters that have been presented here or that have not been presented but are worthy of study.

(Applause.)

THE CHAIRMAN: I know you would all wish me to express to Dr. Furst the gratitude of the Association for his great kindness in presenting these difficult and entangling things to us so clearly. I am glad you should have gotten one instance of the sort of kindly helpfulness that comes from him, to which I have referred.

THE COLLEGE CURRICULUM*

By DR. KELLY.

The material here presented is taken right out of the laboratory. In the office of the Association and the Council of Church Boards of Education numerous studies of college curricula are being carried on and are in different stages of development. The fundamental material of these studies is furnished by the American Education Survey to which reference was made at some length at the last annual meeting of the Association.

As indicating not only something of the method of procedure, but that a consistent policy has been pursued in making the computations upon which the charts are based, the formula in terms of which the graphs have been constructed is given.

The method is yet in its elementary stage. It has been used in graphing approximately 75 cases, and is suggested as a tentative method of procedure. Before anything of finality is reached, about 300 programs covering institutions of all kinds, from all sections of the country, both those

*The charts have been made under the immediate supervision of Miss Lura Beam, Associate Secretary of the Council of Church Boards of Education, who is chiefly responsible for the technique. Other members of the staff and numerous college officials have made valuable suggestions as the work has progressed.

accredited by sectional and national associations, and those not so accredited, should be examined. (The credit allowed for elementary and intermediate Chemistry, for example, should be ascertained by canvassing the practice of a large number of institutions of good standing.)

(For Counting):

1. The measure of comparison is the semester hour, of which 120 to 128 are required for a degree. Term hours, credit hours, points, units, etc., were changed into semester hours.

2. Only courses actually given in the year of the catalog announcement are counted.

3. Only courses for which undergraduates are eligible are counted.

4. Only courses for which credit is specified are counted.

5. Two laboratory hours are counted as one recitation hour.

6. Two hours practical work in Physical Education are counted as one recitation hour.

7. On a sliding scale of credit (e. g., 3 to 4 hours) the lower is taken.

8. Elementary and intermediate work in foreign languages (even when 8, 10 and 12 hours credit are stated) are counted as 6 semester hours per annum.

9. Courses in "Methods" are counted under their respective departments unless they are taught by specialists in the Department of Education.

10. Foreign language courses given in English are classified under "Latin in English," "English," "History," etc., depending on the department offering them.

11. The number of hours given to junior college work and senior college work respectively are recorded.

(Many of the graphs show this difference by shading work for which only juniors and seniors are eligible.)

12. The written record is arranged in the descending order of succession, the department offering the greatest

number of hours in the first place, the next greatest in the second place, etc.

(For Graphing):

13. The department offering the greatest number of hours is put in the center of the graph, the two next in order on either side, and this is followed down through the smallest departments.

14. Twenty-four semester hours are counted as a major; the combined offerings of departments teaching this amount constitute the area of specialization.

We report now upon a study which the Council of Church Boards of Education is making of certain colleges with Congregational affiliations. In the first place, twenty such colleges were selected from those whose data were accessible and comparable; colleges located in Florida, Georgia, Ohio and farther west. From the curricula of these colleges the median curriculum was calculated and constructed. The area of specialization in this curriculum included but seven departments: Latin, Greek, Mathematics, English, Chemistry, Biology and French. That is to say, the median Congregational college advertises a major in these seven subjects only. Not too much importance should be attached to this median curriculum since it included colleges of different stages of development. The fewness of these departments, however, and the fact that for the most part they are what may be called the "old line subjects," immediately attracted attention and led on to further investigation.

In these subjects the emphasis is placed consistently upon the major departments. The fact is not lost sight of that many colleges emphasize their minors which are brought together in groups. Sufficient justification for the present limitation of field is found in the fact that one thing at a time should be done. The question as to the different educational emphases found in the major system and the group system will be referred to later in this discussion and should be subjected to careful study by the Commission another year.

A word of explanation is given as to the meaning of the legends on the charts.

The *hours advertised* is an exact statement taken from the catalog of the college, deducting courses for which credit is not given and courses offered in alternate years as indicated in the formula above.

Hours offered is the exact statement of the institution as to the courses offered, i. e., for which students registered and which were taught during the year for which the study is made. If the amount offered is less than the amount advertised, the degree of difference is indicated by single crosshatching; if the amount offered is greater than the amount advertised, the difference is indicated by double crosshatching.

Semester hours earned shows the quantitative relationship of departments as it is determined by student enrollment. To secure the earnings of each course the number of students in each course is multiplied by the number of semester hours credit granted by that course; the addition of the earnings of all courses within a department results in the total earnings of that department. This departmental product is expressed in horizontal bars applied over the diagram of advertisements and offerings. It is constructed differently from the original diagram to show that it stands not for semester hours advertised or offered, but for semester hours earned by student enrollment. The scale of construction is sixty-four times smaller than the scale for semester hours advertised and offered. The bars are comparable among themselves.

This process has the crudity of all quantitative measurements. It was thought inadvisable to introduce the qualitative measure (i. e., the amount of A, B, C, D, E and F credits) into a study already composed of several elements. It may later be considered in an individual study of that issue alone.

There is no way of showing without a supplementary study, the proportion of subjects prescribed and subjects elected in these particular cases. (The general practice of

American institutions in the matter of prescribed subjects has been reported by the Bureau of Education.*

It must also be observed that the representation of subjects usually known as of junior and senior rank, e. g., Economics and Astronomy, in which ordinarily relatively few students register, will be smaller than that of subjects open to registration in all four years and smaller than subjects taken by the larger numbers of sophomores and freshmen. This difference is more conspicuous in small institutions.

The advertised opportunity for specialization shows the departments in which at least a major (twenty-four semester hours) of work is advertised during the school year under observation.

This study ignores all courses offered in alternate years or more seldom. It was originally meant to ascertain the full offerings of every institution, but the varying practice of colleges in their catalog statements led to confusion in interpretation and resulted in the only method of counting which can be consistently applied without individual correspondence. Manifestly this is a hard measure for the very small college and the struggling department.

*Bureau of Education. Bulletin, 1920. No. 7.

A CONGREGATIONAL MEDIAN COLLEGE

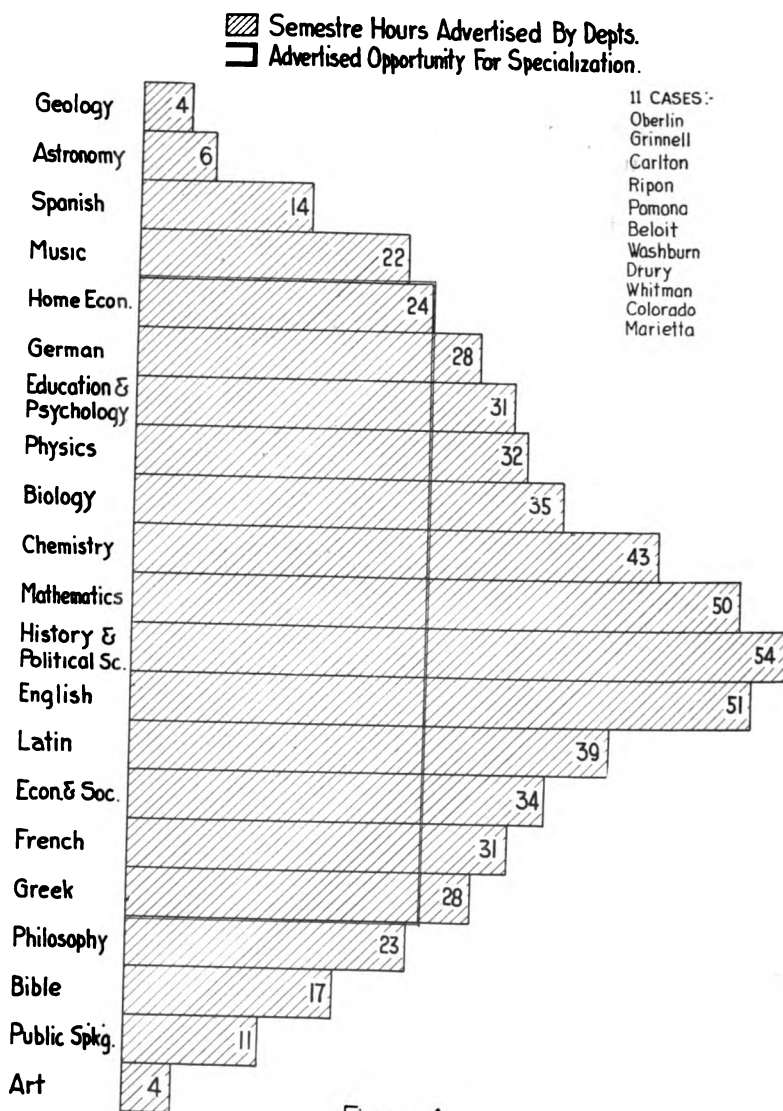


Figure-A

Figure A is the Median Curriculum made up from the catalog announcements of the Congregational colleges on the lists of leading standardizing agencies, except that the data concerning Knox and Middlebury are not included in this chart. This Median Curriculum includes as majors, Home Economics, German, Education and Psychology, Physics, Biology, Chemistry, Mathematics, History and Political Science, English, Latin, Economics and Sociology, French and Greek. Perhaps this might be called the administration's idea of what a standard college curriculum ought to be, or of what a standard college ought to be prepared to offer to its students. At least, this is the Median of what is announced in the several catalogs.

All the subjects in the first list given are included but the list as a whole is not so definitely restricted to subjects which may be called disciplinary or cultural.

In this Median college opportunities are announced for majoring in two ancient and two modern languages and in five sciences (including the ancient subject, Mathematics, and the modern subject, Home Economics). It is noteworthy that History and Political Science stand first in the number of hours offered, and that Education and Psychology and Economics and Sociology are included among the majors. It is equally interesting that Philosophy falls somewhat short of a major as does Music, while less than a minor is offered in Bible, Public Speaking and Spanish. A total of twenty-one departments are announced.

This medium of institutions of a specific group is subject to all the difficulties of combining not exactly similar things. These institutions have their idiosyncracies. History and Political Science were combined to carry out the practice of the greater number of cases. If they were not so combined, English would be the core of the curriculum. If they were cut apart, there would remain a major in History: Political Science might in some cases have to be buttressed with Economics or Sociology to make a full twenty-four hours' work in any given year. The two latter departments, generally restricted to the junior and senior years would not, if separated, make potential major subjects. There would, however, be enough of their point of view adequately to broaden any allied subject and hence make a unit.

In the same way, if the Education and Psychology were cut apart, a major in Education would remain but not one in Psychology. Psychology, if grouped with Philosophy would make a major in that department. The work in Home Economics just achieves twenty-four semester hours by the inclusion of all the work in Methods of that department. It would not reach it on technical work alone.

The work in Music might very possibly be a major subject if all institutions definitely announced their full credit.

There would surely be a median minor in Bible if courses given in alternate years were included, but this measure is omitted for every institution and every department.

A COLLEGE OF 700 STUDENTS

Semestre Hours Earned By Departments.

1919 - 1920

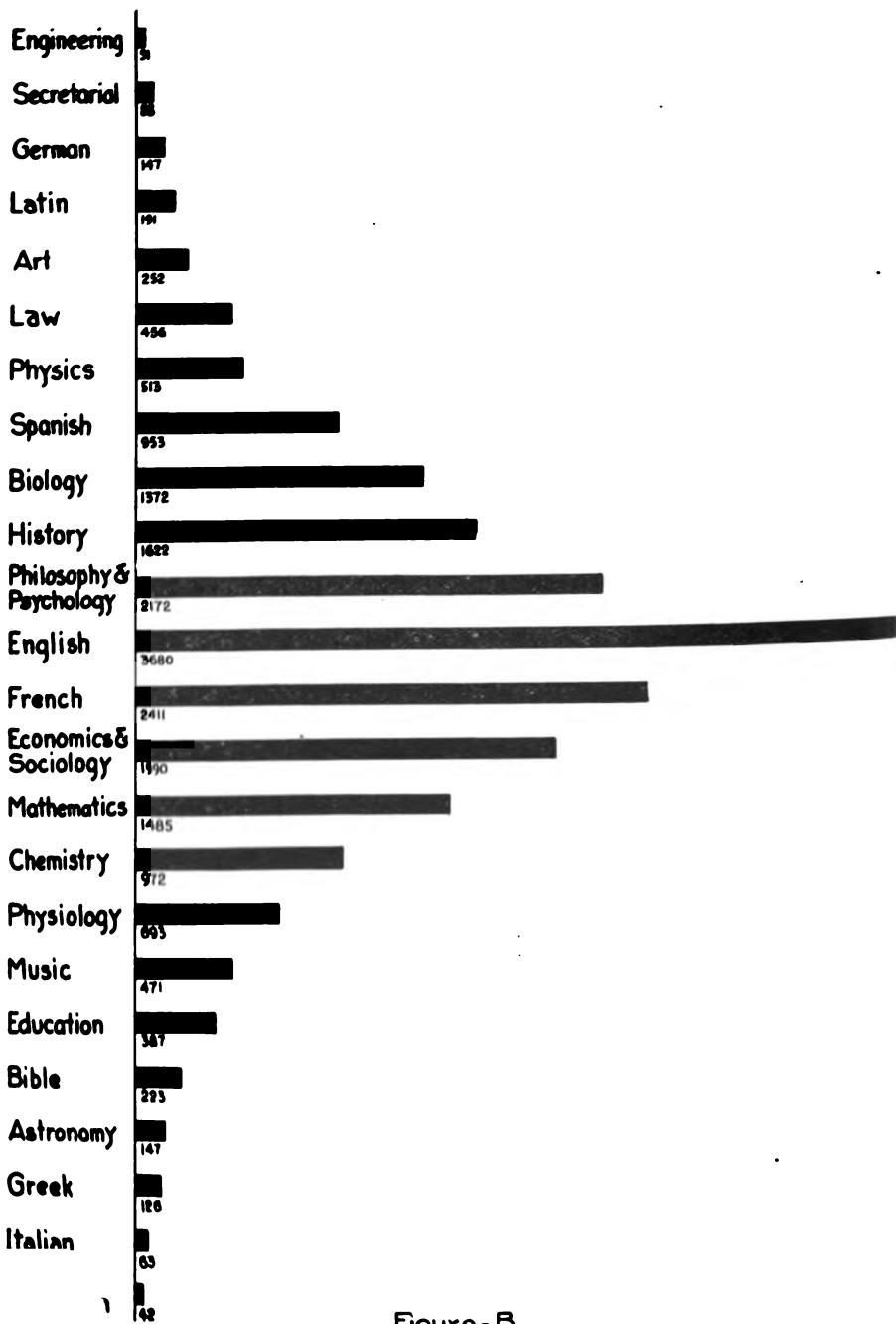


Figure - B

FIGURE B

This figure shows only the semester hours earned in the several departments of a coeducational college of 700 students. English leads all other departments, with French second, Philosophy and Psychology, Economics and Sociology, History, Mathematics, Biology, Chemistry and Spanish following in order.

The total semester hours earned in these nine departments is 16,657 as compared with 3,850 in fifteen other departments. This is a striking illustration of the tendency toward concentration in student election and raises anew the question as to whether the tendency of many curriculum builders toward horizontal spreading is economically or educationally justified.

Not only does this chart show the tendency toward concentration in hours earned by students but also the tendency toward the modern socialized subjects in the curriculum. Of the nine leading departments, only two, Mathematics and Philosophy, belong to the traditional college course.

A COLLEGE OF 1000+ STUDENTS

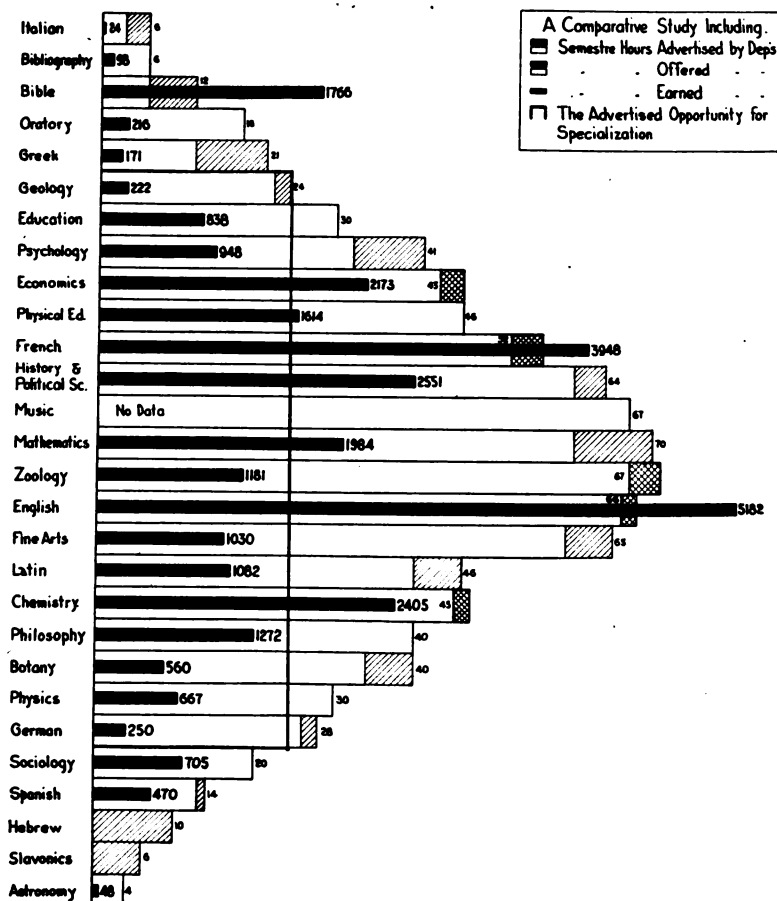


Figure C

Of the eighteen major departments, six, at least, offer a double major of work or more, and all but two offer at least a major. (Music data not available.) In Economics, French, Zoology, English and Chemistry more work is offered than advertised. In Greek, Hebrew and Slavonics only is there any marked discrepancy between work advertised and offered. English leads in hours earned and is followed by French, History and Political Science, Chemistry, Economics, Mathematics and Bible. Of the hours earned 27,907 are within the area of specialization, and only 3,498 without this area. Of this number more than half, 1,766, are in Bible.

This is a coeducational college.

A COLLEGE OF 400 STUDENTS

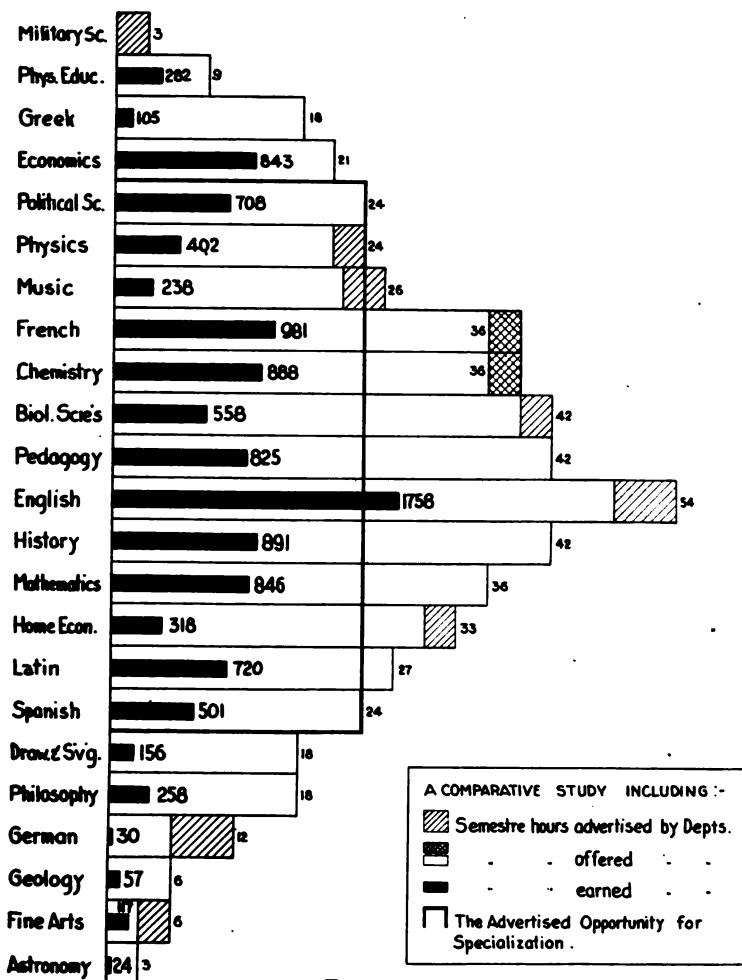


Figure-D

A coeducational college which has evidently found its task, there being a remarkable correspondence between the work advertised and offered. In all but two of its advertised majors a major or more of work is offered. In two of its majors more work is being offered than advertised: in six they exactly correspond. Of the thirteen majors two only are from the traditional curriculum. English stands first in semester hours earned. Nearly all of the majors are strong in this particular. The accidental juxtaposition of hours earned in Greek and Physical Education is interesting. Both departments are on the elective basis.

A COLLEGE OF 400 STUDENTS

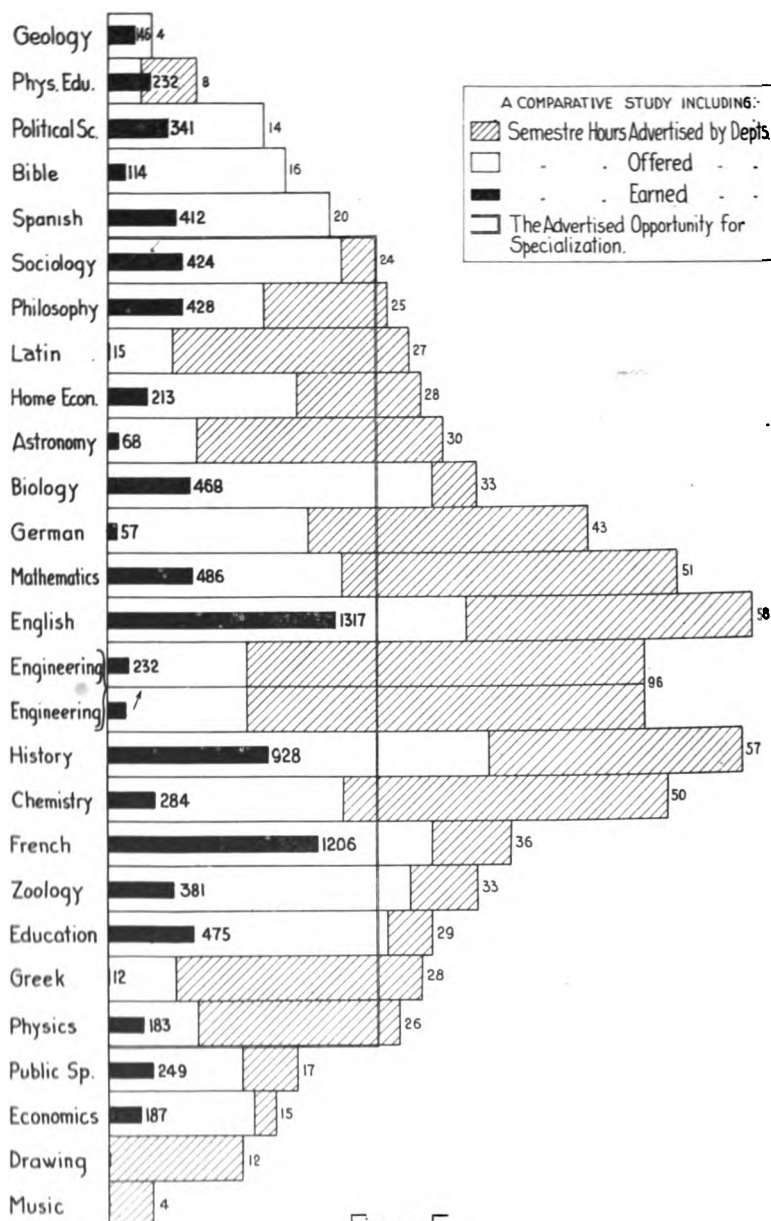


Figure-E

FIGURE E

Another coeducational college of 400 students. This college announces eighteen major departments, including the traditional subjects, Philosophy, Latin, Greek and Mathematics. Of the eighteen, six only offer a major's work. In eight of the eighteen major departments not half of the work advertised is offered. Of the total number of major courses advertised slightly more than half are offered. Only one subject—Spanish—is advertised as a minor. In this subject as in Bible and Political Science all the work advertised is offered. In the catalog advertisement Engineering is included as a department of the college and not as a separate school. It shows the greatest discrepancy between advertisement and offering. Note three distinct groups of major departments. If in this case, as in some others, Zoology had been grouped with Biology, the hours earned in Biology would have reached nearly to the earnings of the first departmental grouping.

A COLLEGE OF 300 STUDENTS

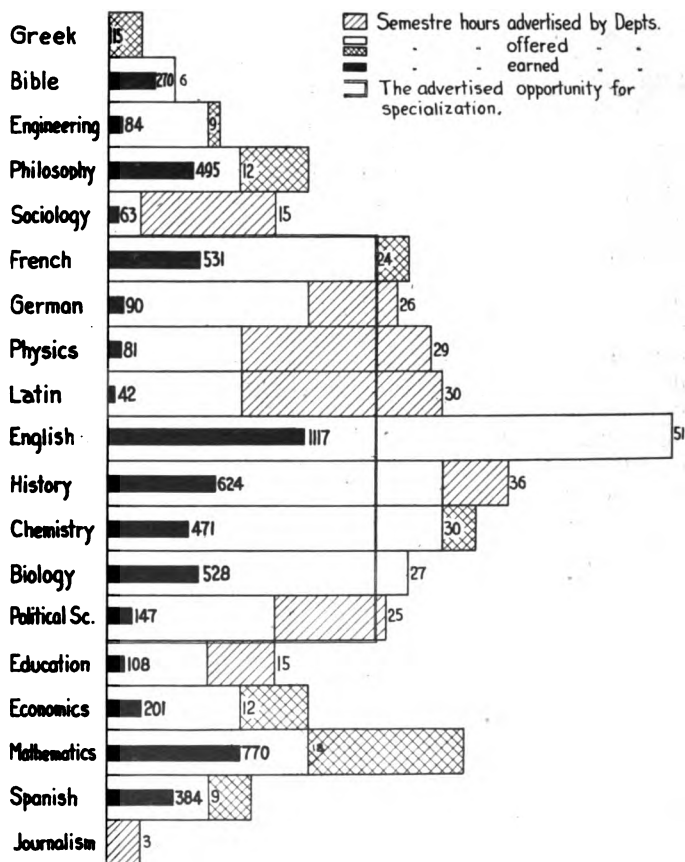


Figure-F

FIGURE F

Figure F gives four types of information, as indicated by the legend, concerning a coeducational college of 300 students. A major or more of work is advertised in the catalog in nine departments, English assuming the central place with fifty-one semester hours. Within the area of specialization the curriculum is strikingly modern.

Mathematics does not appear among the advertised majors although in student hours earned it is second only to English.

In English and Biology the courses offered exactly correspond to the courses advertised. In French and Chemistry more courses are offered than are advertised in the catalog. In all other major departments the offerings fall short of the announcements, in Physics and Latin notably so.

Among the subjects in which a major is not provided for in the announcements more courses are offered than advertised in Greek, Engineering, Philosophy, Spanish, Mathematics and Economics; indeed, more courses are offered in the sub-major subject Philosophy than in the major subjects Physics and Latin.

In the matter of semester hours earned, English stands first, Mathematics, announced as a sub-major, second, and History, French and Biology in order. In proportion to the number of hours advertised more semester hours are being earned in Bible than in any other subject in the curriculum.

The advertised area of specialization includes nine departments. Of these, five only, French, English, History, Chemistry and Biology, are within the area of specialization measured in terms of hours earned. Add to these Mathematics, and you have a college of three hundred students specializing in five departments, although courses are being offered in eighteen departments.

A COLLEGE OF 100 STUDENTS

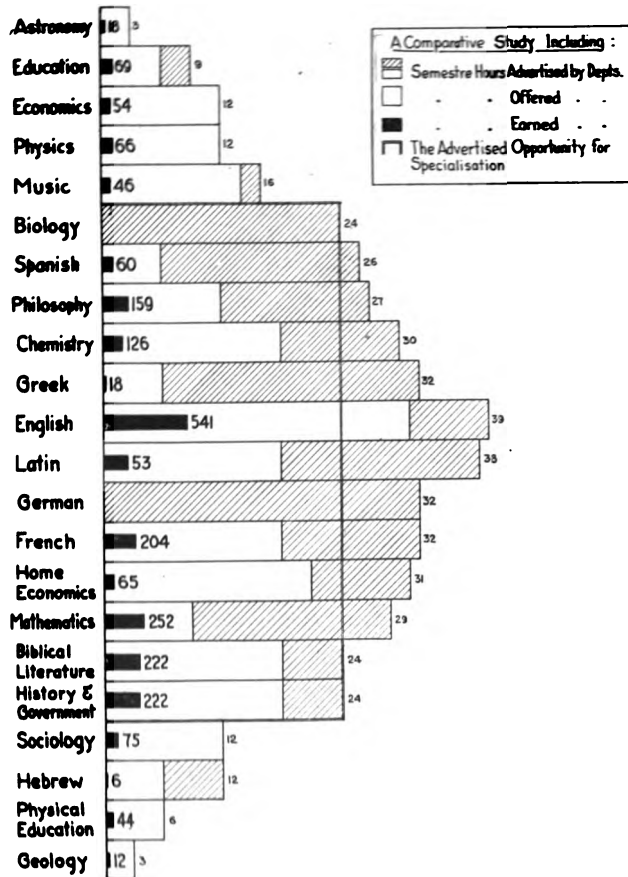


Figure-G

Thirteen major departments are advertised; a major's work in English only is offered. No minors are announced, but the equivalent of a minor's work is being offered in seven major departments. Students register to the limit of the announcements in Economics, Physics and Sociology. English leads in hours earned, followed by Mathematics, Biblical Literature, History and Government and French.

The Professor of Biology is on leave. The A. B. degree requires six semester hours in History and Government, Biblical Literature and Mathematics, and this fact is reflected in the hours earned in these departments. The college announces that it wishes especially to serve a rural field.

A COLLEGE OF 65 STUDENTS (RURAL. MIDDLE WESTERN)

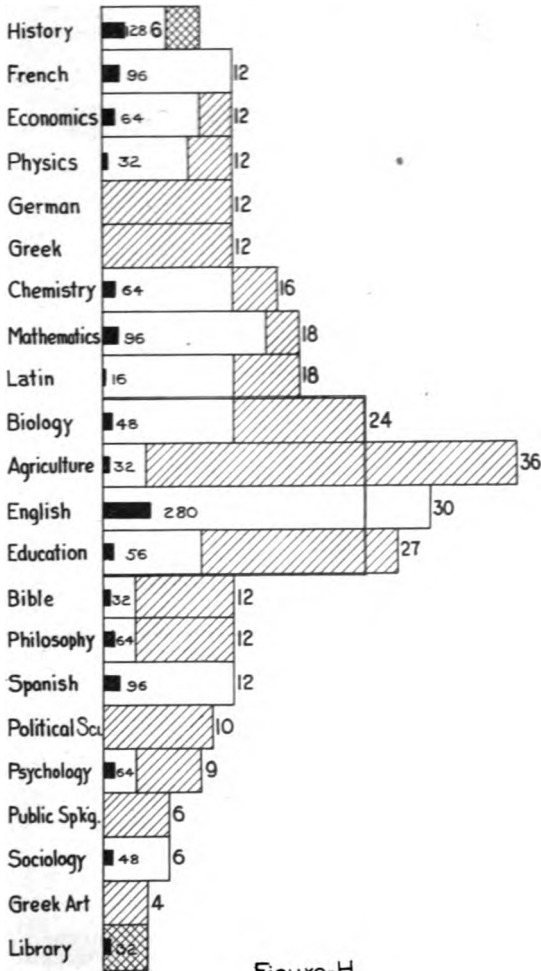


Figure-H

This is a small college with only four majors announced. There is an apparent effort to adapt the major courses to the local agricultural constituency, but the department of English alone offers all its advertised courses. In practice more work is offered in the minors than the majors (English excepted). In French, Spanish and Sociology the students take all the work advertised; in History and Library Science, more than the work advertised. The institution in hours earned is more nearly a junior college than a standard college.

A COLLEGE OF 700 STUDENTS

Distributed in terms of courses and semestre hours
between Social, Cultural, Professional and Scientific Training

■ Senior College Courses
▨ Junior
← Opportunities for Specialization
1929-1930

UNIT:
□ One Semester
Hour

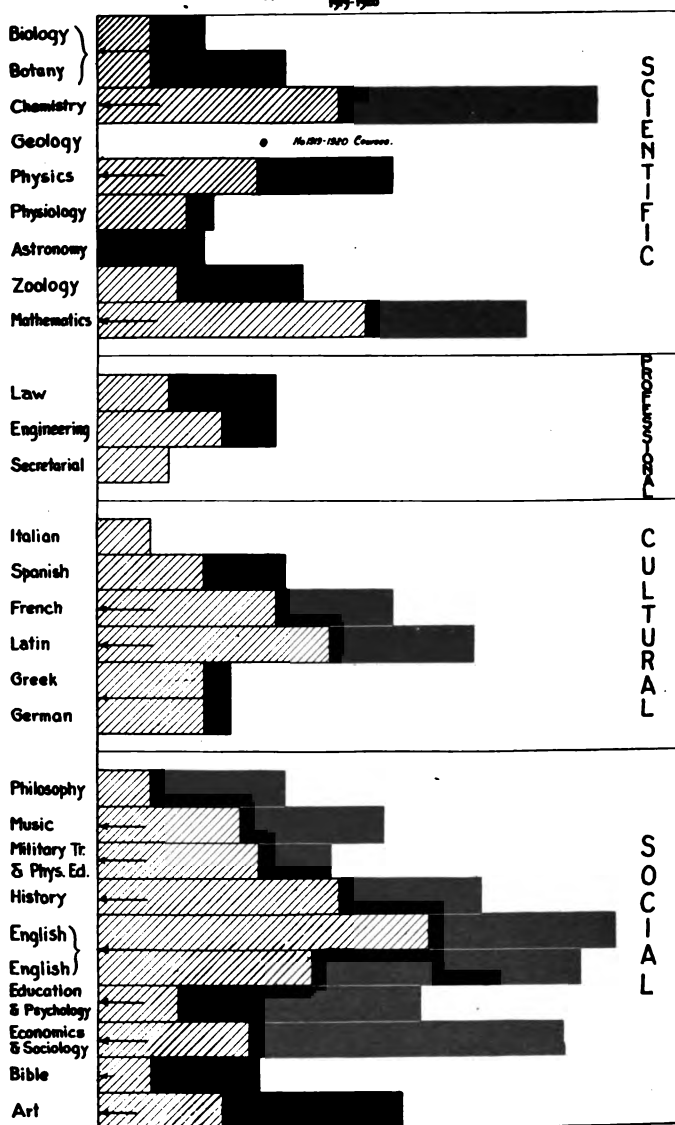


Figure - K

FIGURE K

Figure K shows functional tendencies as well as quantitative differences. Horizontally the subjects are arranged in groups; perpendicularly the difference is shown between junior and senior college work. (Junior college work is work advertised for freshmen and sophomores; senior college work, that advertised for juniors and seniors.)

In cases where the college does not specifically state the distinction, the course is allocated according to standard current practice.

The college advertises majors in four sciences: Biology, Chemistry, Physics, Mathematics; in two languages: French and Latin; and in seven subjects not so easily classified: Music, Military Training and Physical Education, History, English, Education and Psychology, Economics and Sociology and Art. No major is advertised in the professional group. If the sciences and foreign languages may be termed *cultural* and *disciplinary*, the other subjects *social* and English both, there is a perfect balance between the two motives, English being the core of the entire curriculum.

It is impossible, of course, arbitrarily to assign a subject to one of the above classes. The qualitative element of instruction is an important determinant. However, elementary work in foreign languages and in such sciences as Chemistry, Biology and Mathematics could scarcely be referred to as having social value. The same statement applies to Art and Music in their elementary forms, especially elementary practicum. In general the large amount of junior college work included under the sciences and foreign languages of itself justifies the classification given.

There is also an approximate balance in amounts of junior and senior college work advertised. Astronomy is the only subject in which all the work advertised is of senior college grade. The largest relative proportion of junior college work is in the language group. The catalog offers elementary language work for college credit in six different languages with apparently no discount on the credit.

This is the same college as that shown in chart B. A comparison shows that the heaviest enrollment of students is in major subjects, although Physics, Latin, Music, Physical Education and Art drop out of the preferred class and the minor Spanish comes to the front.

This college states in the catalog its aim "to prepare its graduates for special distinction in whatever later callings they may choose."

DEPARTMENTS OF ENGLISH

DISTRIBUTED BY FUNCTION

1918 - 1919 1919 - 1920

ACollege of 800 Students (Co-Ed)

Theory Content		Technique Mechanics Courses		Intensive Senior College Courses		Application	
Old English	Composition	Shakespeare		Journalism (Writing)		Journalism (Editing)	
		18th Century Literature		Teaching of English		English	
Old and Middle English	Short Story	English Novel		19th Century Poetry		19th Century Prose	
Elizabethan Literature	Verse Writing	18		22		Contemporary Literature	
American Literature							

ACollege of 1100 Students (Women)

Theory Content		Technique Mechanics Courses		Intensive Senior College Courses		Application	
English Literature	Composition and Reading	Shakespeare		Technique of Drama		Technique of Drama	
		Speech		Romance		Critical Writing	
Development of English Drama	Dramatic Expression	Dramatic Presentation		Epic Poetry		Journalism	
American Literature	Argumentation	19th Century Poetry		Literary Criticism		24	
Old English	Narration	19th Century Prose		27		31	
Beowulf	Descriptive Writing	Advanced Composition		Shakespeare		36	
Middle English	Writing						

ACollege of 350 Students (Co-Ed)

Theory Content		Technique Mechanics Courses		Intensive Senior College Courses		Application	
History of English Literature	Old English	Rhetoric		English Criticism		Teachers Course	
		6		Drama		2	
American Prose		Puritan Period		Prose		19th Century	
		13		Browning		15	

ACollege of 500 Students (Men)

Theory Content		Technique Mechanics Courses		Intensive Senior College Courses		Application	
Introduction to Literature of Old Test.	Advanced Composition (No Credit Stated)	Elizabethan Drama		Poetry		12	
		American Literature		Literary Criticism		18	
English Poets							

In spite of the danger incident to interjecting judgments into measurements and the other danger of appraising means of accomplishment while the ends are still under discussion, we report an effort to balance certain intellectual values of a few undergraduate departments.

These values are: first, the theory and content of a subject, including its historical development; second, its mechanics and technique from the most elementary to the most advanced form taught in college; third, the senior college courses which stress intensive work in narrow and highly specialized fields; fourth, the amount of application possible or desirable. No theoretical proportion is suggested for any case.

The departments selected for illustration, all offering courses for the full four years, are English, Foods and Nutrition, and Physical Education.

In Chart M an attempt is made to set forth this functional distribution of the content of certain departments of English. In the case of the college of eleven hundred students it is shown that approximately the same number of hours are devoted to the *theory, technique, intensive study* and *application* of English. The amount of time devoted to the mechanics of English is noteworthy in view of the heavy English requirements for entrance. The phase of theory and content is covered moderately. There is in the senior college courses copious material requiring intensive work. The most striking feature of this college's offerings is found in the field of *application*. This institution has a theatre in which types of original work are presented by student casts.

The college of eight hundred students has a fairly well balanced program with relative emphasis on intensive study. Application is confined to the two fields of journalism and teaching.

The college of three hundred and fifty students has a rather modest English program with scant attention to application and a year's work in technique.

The college of five hundred students emphasizes

Chiefly Food, Nutrition and Household Administration

Distributed By Function :-

1. Theory Content
2. Mechanics Technique
3. Intensive Senior College Courses
4. Application

NOTES

Person's Current	His/Her Education	His/Her Security Clearance Number	Agency
Friend Relationship	Card #		
Relationship			
	Place of Meeting		
	Lunch and Cafeteria		
	Cashier (Home)		
	Household Management		
	Marketing		

● a good and robust

theory and intensive study. Nothing appears under the head of application.

The possibilities of departments of French may be tested in the same manner and will be found to graph very much as do departments of English. Two important questions raised by the visual presentation of the facts are "How much work in mechanics and technique should be given for college credit?" and "Is it profitable to give in college modern language work which hardly goes beyond training in mechanics and technique?" Bryn Mawr College settles this question in its own case by giving no elementary and intermediate courses for credit. Various colleges meet the problem by giving one elementary course for beginners, one for entrants presenting two units and one for entrants with three units. This presents the philosophy of the issue with cruel distinctness to the small college offering such an assortment of work as elementary and intermediate French, History of the Drama, Old French and Teaching of French.

Figure N illustrates two institutions giving the B.S. degree for technical work in their Schools of Home Economics and one college of liberal arts offering a major in that department which leads to state certification of teachers.

The three departments are not comparable for this reason and for the fact that Institution II illustrates a combination of the departments, Cookery and Nutrition. The work in Nutrition is added to illustrate the possibilities of cross election in an institution offering Home Economics on this scale. It furnishes a background entirely different from that which the liberal arts college commonly supplies. It is not intended to suggest that a student could major in both departments.

Institution I offers comprehensive training in many branches of Home Economics.

Institution II offers very ample work in technique. It covers half a dozen phases of cookery. The theory and content phase goes liberally into the undergraduate fields of

Distributed By Function

In Courses And Semestre Hours

1. Theory Content
2. Mechanics, Technique
3. Intensive Senior College Courses
4. Application

INSTITUTION IV

A four year course leading to the B.A. degree and a Special Diploma

Intensive Therapy Mechanisms Techniques		Senior Call Courses		Application
For women				
Theory of Content	Therapy of Process/Content	Item Form	Item Form	Pract Work Teaching
		Adv	Adv	Phys Exam Diagnosis
			Form	

FROM WELCOME IN

FOR MEN	
Anatomy	El Gym Adv Gym Adv Phy Ed
Theory of	Phys Ed & Diag Pract Wk, King Practical Wk and Teacha *

Credit not designated *

INSTITUTION V.

A four-year technical course leading to the B.S. degree and the professional diploma

Theory	Mechanics	Intensive Senior	Application
Content	Technique	Coll. Courses	

Example C

Physical Tr.	Recreation
A	Social Centers
B	Atthegem- erity
C	Advanced Teaching of Hygiene &
D	Practice Hygiene & Phys Ed
Formal	The Dramatic
Gymnastics	Game
Applied Physiology	Art, Pans, Games Jacks, Balls, etc.
History of	Classical Sports
Phys. Ed.	Practicum
Physiology	Playgrounds &
Games, Dance	Community Centers
& Correct.	Club
Games &	Leadership
Crafts of	Games &
Camping	Dramatic
Physical Education	Expression Phys. Educ.

INSTITUTION VI

A five year course leading to the B.A. degree and the certif-

Theory	Mechanics	Intensive	Senior	Application
Content	Technique	Coll	Courses	

Courses

Prac Tchng	Autography Practical Dem.
Normal Instruction	
Kinesiology	
Symphony Hygiene	
Theory & Methods	
Anatomy	
History & Lit	
Play & Games	
Massage	
Corrective Gym	*
Dancing	*
Outdoor Sports	*
Health Problems	*
Gymnasium	*
Horseback Riding	*
Swimming	*
Correctives	*

Not counted toward degrees. *
Credit not easily counted may
be too liberal.

nutrition and dietetics and is greatly amplified by the additional special adaptation of work prescribed under the department of Chemistry. The intensive work of the senior college year goes into technical problems involving advanced laboratory methods, together with work in application requiring practice in several fields.

Institution III gives a rather simple group of subjects, apparently almost those which might be valued by any woman in the administration of her own home.

Figure 0 can only suggest current practice in Physical Education in institutions of different aims:

The institution giving a technical course centering on this major interest (together with the English, History, Science and Modern Language of the ordinary junior college years and some prescribed work in Music) gives a great amount of theory. A profession which must be prepared for chiefly in the college years, without special high school training as an entrance requirement, must of necessity also give a great deal of mechanics and technique. All the intensive senior college courses have specific reference to application.

The institution giving the five year course has built a less exclusively professional program. Its work is rather more like that of a departmental major. It does not go into intensive fields, but gives a modest amount of work in theory and health amplified by instruction in games, sports, some elementary work in correctives and the conventional work in application.

Work in swimming, dancing, outdoor sports and horseback riding is not counted toward the degree. The credit hours are hard to count in this institution and the estimates may err on the side of liberality.

The remaining institution stresses predominantly the side of theory and content. Such terms as "Physical Training" and "Elementary Gymnasium" are large enough to cover all kinds of practice on the side of mechanics and technique.

PRINCIPLES AND TENDENCIES

Certain tentative conclusions may be stated here chiefly for the purpose of focusing attention upon questions more or less vital in the organization of the college curriculum.

1. There is without doubt *a persistence of certain traditional subjects in the catalog announcements*. No longer do these colleges announce Mental or Moral or Natural Philosophy or Metaphysics or even Logic as an unrelated subject. Philosophy, however, appears in every catalog announcement covered by this study although rarely as a major department of itself. In most instances in which there is a major in Philosophy the department includes either Psychology or Education or both.

Hebrew has almost vanished from catalog announcements. One college only among those charted advertises Hebrew and this college did not offer it during the year covered by the study.

Greek is found as an advertised study on every chart. It is a major department in the median curriculum. When it comes to hours offered and especially to hours earned, Greek is almost negligible, although one institution offers more than it advertises. Where Greek makes a stronger showing, it is usually bolstered up by a college requirement.

Latin is usually included within the announced area of specialization, although it attains the major standing in hours offered and earned, only in the college with 1,000 students and in a college in which Latin or Greek is required. Other traditional subjects such as Mathematics, History and Chemistry not only persist in the announcements, but rank high in student preference. History and Chemistry, of course, are traditional in name rather than content.

2. There is a marked *tendency toward student registration in the modern subjects*. English is uniformly the core of the curriculum. French ranks second in a surprising number of cases, its relative position as a foreign language being due undoubtedly to the war. The other subjects which colleges offer freely and which students prefer

are Chemistry, as indicated above,—another war product, no doubt—History, especially when linked with Government, and Political Science, Economics and Sociology, Philosophy (coupled with Psychology or Education) and the biological sciences. Mathematics is mentioned last, not because it falls in the last place—it is usually among the three or four preferred subjects—but because it is not “modern.” It is the most striking instance of the persistence of a traditional subject.

3. There is a tendency toward *horizontal spreading in curriculum building*. The typical college administrator continues to think of his institution as an omnibus. The prevailing ideal still is “to teach,” or at least, to advertise in the catalog, “every thing useful in creation.” This tendency is not so marked with the Congregational colleges which are among the educationally conservative groups; in this respect they are not typical. Their leaders stand for the integrity of the four years’ college course, for the liberal college of arts and sciences, for the “New England” type of American education. And yet, even here, we find a good many departments. The total number of departments of the median curriculum is 21, of the college with 1,000 students 28, of one of the colleges of 400 students, 27, and of the colleges with 100 and with 65 students, 22 each.

4. This tendency toward horizontal spreading is all the more striking when compared with the decisive *tendency toward concentration in student elections*. This has been covered by implication in the paragraph on student registration in the modern subjects. But the full significance of the tendency toward concentration was not stated there. In the college of seven hundred students which advertises twenty-four departments, the great bulk of the student registration is in nine departments. In one of the colleges of four hundred students the enrollment is chiefly in six departments. The college of three hundred students has only five departments within the area of specialization expressed in terms of student registration. In general it may be said that the stronger colleges have relatively slight

enrollment without the area of specialization. In each case, from the quantitative standpoint alone several departments could be omitted without serious interference with the work of the college.

Of course, it is not ordinarily desirable to eliminate departments only because they do not "pay" as a department store might do. It is possible to be guided by the principle of "major and service lines of work" laid down by the Bureau of Education.*

Furthermore, these charts seem to point to certain departments as major lines of work and others as service lines of work in the college of liberal arts and sciences in accord with this principle. In ten strong Congregational colleges the media of six departments in which most students are registered, in order are English, French, History and Political Science, Mathematics, Economics and Sociology, Chemistry. In ten of the weaker Congregational colleges the media of the six in order are English, History and Political Science, French, Chemistry, Mathematics, Education and Psychology. These are the same subjects in slightly different order with Education and Psychology taking the place of Economics and Sociology in the latter list. In the college of seven hundred students there is a slight variation only: English, French, Philosophy and Psychology, Economics and Sociology, History and Mathematics.

5. It is certain that the whole subject of *college credit for beginning and intermediate work* should be carefully canvassed. There is at present great variation in the practice of excellent institutions in this matter. Many factors enter into the problem. The discussion of this point must necessarily be postponed.

6. There is also an approximate balancing in the catalog announcements of what Dr. Osler referred to as the *old humanities and the new science*. An analysis of this

*U. S. Bureau of Education, Bulletin 1916, No. 19, p. 50 ff. No. 20, p. 102 ff.

situation is given somewhat in detail in connection with Figure K. If one runs through the successive "areas of specialization" he will note the presence in about equal proportions of those subjects which are usually defended as of cultural and disciplinary value and those of social content and motive. Here again, however, the student registration interferes with this ideal balancing. As already pointed out, Mathematics is in practise the disciplinary subject *par excellence*, although the predominantly elementary science and language work followed in most colleges must be classified as of personal rather than social value. The disposition of college authorities is to provide both for the arts *and* the sciences, not to make a college with undue emphasis on either group of studies.

7. Closely akin to this point is the manifest effort in some cases to *adjust the curriculum to the constituency*. One small college with a rural constituency advertises such an adjustment in the catalog, but the students register without reference to the catalog plan. Another small college with a rural constituency advertises thirteen major departments and the students elect a major of work in one of them. The subjects chiefly taken in this college are English, Mathematics, Biblical Literature, History and Government, Philosophy, French—no striking irregularities here! As already pointed out, the same subjects are elected in the strong and the weak colleges. This may be contrasted with the enrollment in the large colleges of New York City, for instance, which is overwhelmingly vocational.*

8. A more serious fact is that not much progress has been made or effort expended in *adjusting the curriculum to the college resources*. The weak and struggling college announces about as many departments as the strong and well equipped college. Undoubtedly in many colleges much

*Columbia requires of all freshmen a 5 hour course in *Contemporary Civilization*, and the College of the City of New York requires a course of senior college students on *American Civilization*.

work is advertised which could not possibly be offered if by some unexpected turn of the wheel of fortune students should register for the work. Some of the offerings of colleges, furthermore, are on false assumptions as to cost of instruction. It is not more economical to maintain a Professor of Latin with small classes than a Professor of Chemistry with large classes. In the studies of the cost of the student clock hour at the University of Washington* it was shown that in that institution Latin and Greek were among the most expensive subjects to teach and the sciences the most economical. No college studied would profess that it had adjusted its curriculum entirely to its resources. Few colleges or even standardizing agencies have seriously faced this problem. Attention is called to "Administrative Suggestion" number six of the Regents of the State of New York, effective July 1, 1920—"The curriculum should have justifiable relation to the resources of the institution."**

*U. S. Bureau of Education, Bulletin 1916, No. 26; U. S. Bureau of Education, Bulletin 1919, No. 15.

**Regents Rules, Section 24 and 400-c.

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Seventh Annual Meeting

Edited by

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Oxford, Ohio

Secretary of the Association

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W. G. Clippinger, Otterbein College, Westerville, Ohio.

Sabbatical Leave

- W. A. Neilson, Smith College, Northampton, Massachusetts, Chairman.
W. D. Scott, Northwestern University, Evanston, Illinois.
C. A. Richmond, Union College, Schenectady, New York.
O. E. Randall, Brown University, Providence, Rhode Island.
J. S. Nollen, Grinnell College, Grinnell, Iowa.

Academic Freedom

- Charles N. Cole, Oberlin College, Oberlin, Ohio, Chairman.
C. F. Thwing, Western Reserve University, Cleveland, Ohio.
Roy C. Flickinger, Northwestern University, Evanston, Illinois.
H. M. Gage, Coe College, Cedar Rapids, Iowa.
W. J. Hutchins, Berea College, Berea, Kentucky.

Publications

- C. W. Chamberlain, Denison University, Granville, Ohio.
R. L. Kelly, 111 Fifth Avenue, New York City.
R. M. Hughes, Miami University, Oxford, Ohio.

THE COLLEGE CONTRIBUTION TO AMERICAN EDUCATION*

I. Elmer Elsworth Brown, Chancellor, New York University

The things that I wanted to say in behalf of the colleges were things with reference to what we have dreamed of and talked of for many years and, it seems to me, have only partially accomplished as yet. The College is the great significant, forceful, formative element in American Education, and it is a mixture of incongruities. It is a paradox—how great a paradox every college president well understands; but there have been some things that we have been consistently dreaming of, and consistently aiming toward, during many years past, and I think that some of them may be reiterated here, because undoubtedly they have to do with the college contribution to American education as we intend it to be.

In the first place, we speak of a college as a disciplinary institution. Curiously enough, the only part of the college in which severe, Spartan, absolute discipline is enforced, is in our play. We work in haphazard fashion, but we play by absolute rule, and the colleges, in their serious, their scholastic side, have to learn from the play side, where discipline has been perfected.

But I think that we have missed, in particular, this aspect of scholastic discipline: We have failed hitherto to find a substitute for the introductory training in the method of thought that gave the young men of the mediaeval universities the forms and implements of the scholar. We come nearest to a substitute for mediaeval logic in our present day colleges in the training of our scientific laboratories. There men are to a certain extent learning the method of thought. But they are not, in the most of the colleges, in any systematic and comprehensive way, acquiring that discipline of mind by which one is to discriminate between truth and error; and if we do not give the college student

*Addresses at opening banquet.

there are some types of specialization that can hardly be called liberal.

I was reminded of this by an incident that happened to me some time ago. There was a young man who came to play tennis with my children, and I said to him: "Do you go to college?" He said: "Yes, I am in my last year;" and I said, "Where do you go?" He told me. I said, "Are you taking any special course there?" He said, yes, he was. I said, "Are you preparing for any special business or profession?" He said, "Yes, I am preparing to succeed my father in business." I said, "Well, is the course you are taking preparing you for that?" He said he thought it would. I asked him what his father's business was, and he said he was a manufacturer of nursing bottles!

Now, that can hardly be called a liberal education. I present that proposition to you, ladies and gentlemen, who are accustomed to the processes of logic, and ask you if you do not agree with me.

The contribution of American Colleges to Education could be shown in a single sentence. The inscription in St. Paul's Cathedral is to the effect that if you want to know anything about Sir Christopher Wren, look about you. So I say if you want to know the contribution of American colleges to American life—look about you. These are her jewels. You are all in "Who's Who," and they say "Who's Who" represents the very incrustation of jewelry.

They tell me there are 10,000 names in there. They are growing more numerous every year. Of course, that means an edition of 10,000; if they put 12,000 in, they would have an edition of 12,000—six dollars a copy. Well, they say out of that 10,000, 6,000 and over are graduates of some college. They say 65 per cent of the Congressmen are college graduates, but that ought not to count against them. Every family has its skeleton, but there are some Congressmen that are not college graduates. My own Congressman is a dentist. He defeated a college graduate.

But, seriously, I suppose it is perfectly true that the men who are the leaders in American life, not only in

thought but in action, are, as a rule, the college men. That is not claiming any more than is due to the colleges.

But it is "put up"—if I may use a good, sharp, undergraduate expression—it is "put up" to the colleges to see that the men they are sending out are superior men. We sometimes have to doubt that. The other night I was present at a football smoker where they were rejoicing over a championship. It did not happen to be Union—we are very far from championships this year. There were, perhaps, four or five hundred present, old grads, lawyers, clergymen, men of distinction from all over the country, and they got the particular football hero up on the platform. He swaggered up, knocking the ash off his cigar, perfectly comfortable in the presence of those venerable seniors of his, and the substance of his speech was, "We won. We were not afraid of nobody. We were not afraid of Yale. We were not afraid of Harvard, God, nobody," and they all said, "Well, that's a great fellow." I could not help asking myself, Is this the perfect flower of American Education?

It would probably have been so in almost any university, and we must not take it too seriously; but I sometimes think the difference in standards between the college graduate and the man who is not a college graduate, is not very obvious, certainly it is not as clear as it ought to be. A good many of our college graduates have never got above the jazz stage in music, dress, manners, conversation, or anything else.

I sometimes wonder whether what we have been doing has not been playing up to numbers instead of to quality.

We seem to have an idea that if we are going to do a thing, if we do it to a great many people, we have done it so much the better. Of course, that is not so.

You know, Lincoln said God must love common people, he made so many of them. But once in a while he likes to make a masterpiece, and then he makes an Abraham Lincoln, and so far as value to the world goes, Abraham Lincoln was worth a good many millions of inferior people.

There are some psychologists who say, some pseudopsychologists, that there is only a certain amount of brains

cial spirit into our profession, that is to say, if we ourselves begin to think too much in terms of the rewards, we will inevitably carry that spirit into our class-rooms, and into our institutions, and it will inevitably react upon the students that come under us. If we do that, we shall be losing the finest thing in our profession.

There is a traditional rhyme that I used to hear my old Scotch father recite many times to my delight. I did not understand it at the time, but I have pondered over it a good deal. It is current in the part of Scotland where he was born. It runs like this:

"On Tintock Top there is a mist,
And in the mist there is a kist,
And in the kist there is a cup,
And in the cup there is a drop.
Tak' up the cup and sup the drop,
And leave the cup on Tintock Top."

Tintock is a little peak in Lanarkshire. It rises abruptly out of the plain. Usually about its crest there hangs a Scotch mist, and what that nameless shepherd years ago was trying to express in that rhyme, carried down from generation to generation, was the quest for knowledge, that so many of those humble Scotch folk followed with as keen a zest as ever knight of King Arthur sought the Holy Grail. There on the top of that little peak, hidden in the mist somewhere, was that precious distillation, only to be reached by a hard climb, and by a very careful search. And then, after the disciple had found it, he took that sacred cup, with all the holy fervor of a neophyte taking his first Communion. And then he replaced the cup, so that the Celestial distillation might fill the cup once more for the next comer. Then he turns and goes down the mountain, and there at the foot of the mountain he sees a vision of human need, just as the Disciples came down from the Mount of Transfiguration, and saw the outstretched hands of the demoniac boy, and then under the inspiration of that wisdom which he received there in the heart of the mist, he feels the impulse within him to try to do what he can to cast out these evils of passion and of ignorance, he feels called to be an

apostle of health, and an apostle of sanity and of enlightenment. That is what it meant.

It seems to me to express very beautifully the spirit of education. I know it will be very easy to parody all this, because when the Scotchman seeks a drop, it is not usually that kind of a drop. I realize that.

But, after all, it seems to me that that or some such thing as that, represents the spirit of the teacher. All the great teachers who have had a great and beautiful influence on the world have been men who have had some such spirit as this. They have been men who have found somewhere that Celestial drop of wisdom.

I am reminded of an incident in the life of Jesus, which we might well ponder over many times. It is the incident where the people followed him into the wilderness. And we read "When he looked on the multitudes he was moved with compassion, because they were a sheep having no shepherd." And then what did he do? He began to teach them many things. And notice what he taught them. He was a carpenter, but he did not start a school of carpentry. He did not start to teach vocational things at all. He began to teach principles. He taught them temperance, self-mastery, and brotherly love. He taught them in such words as "Blessed are the meek," "Blessed are the pure in heart," "Blessed are the peace-makers," "Blessed are they that hunger and thirst after righteousness," and "He that would be great among you, let him be the servant of all."

That is very significant language. He believed in education. He would have had no quarrel with the search for truth, with modern science. But somehow you feel that in every word He spoke, in every doctrine He uttered, He opposed himself to the philosophy that would make comfort the end of life; He did not set before men an ideal of satisfaction in the lower sense, of prosperity—He did not set before them the getting of some tangible reward as the end of it all. He saw as clearly as anybody could see that prosperity in any high degree, whether in a man or in a nation, depends upon character. And so He undertook to build up character. We say that a thousand times—

that the building up of character is very nearly the whole story, and so it is. Really it is the recipe for success, nine times out of ten. Yesterday I was talking to the head of an industry in Boston employing 13,000 men. I asked him whether a man with character and health, even if he only knew a little, was pretty nearly always sure of a job. He said: "Pretty nearly always. The men who failed in their jobs were usually weak in character."

It comes back, then, to what we say over and over again, that the end of our work is the building of character. Of course it is. I suppose at the beginning of this year we have all tried to take a larger view of things, and I suppose we have all felt the fearful magnitude of the task that faces any man who is trying to take his share in the work of reconstruction, as we call it. This immeasurable quantity of human misery, of human hate, of the evil things in human life that have been cast up to the surface by this war, they are so overwhelming that even a brave soul might feel daunted by the sight of it. But to us it must not be so. We know very well that our contribution is only a small contribution. But the man who is in a profession like ours will feel himself respond to that call, as a man responds to a fine challenge.

And let me say to you, it is not going to be done merely by an improvement in methods. It is not going to be done by measures at all. It is going to be done by men. And it is not going to be done by the mass of men. It is going to be done by the select few; for it seems to be the law that whenever great and fine results come to the many, it is because of the self-sacrifice of the few. That is to say, some kind of a Cross has always got to be the symbol of human improvement. Because a comparatively few in the world have been willing to do more than their share, and willing to take more than their weight of the burdens, and of the work and the worry; willing to put more into life than they take out, willing to take less rewards than the others, willing to set a higher standard than the others, willing to try to live among high thoughts when others have been living among low thoughts—it is because a com-

paratively few men in the world have been willing to do these things that the great mass of human life has been all thru the centuries lifted foot by foot to higher levels.

There is no profession where there is a larger proportion of such men than there is in this profession in which we have the honor to serve. I am proud to be a member of such a profession. It is not in a spirit of self-righteousness we say these things. We thank God that He has given us a profession where this is the beginning and end of it all; a profession where a man cannot begin to live and to be successful unless he has a good measure of this spirit. We thank God there is such a thing, and that he has called us to work in such a profession.

There is an article in this month's Contemporary Review, entitled, "The Principle of Aristocracy." It is not the aristocracy of birth or of money or of knowledge. It is an aristocracy of *noblesse oblige*. Only as we possess this spirit can the American Colleges make their true contribution to American education and to American life.

III. Mary Emma Woolley, President, Mount Holyoke College.

I stand before you as the most illustrious example in the room this evening of a person upon whom greatness has been thrust, partly because I am a woman—I cannot claim an alibi—and partly because I am a New Englander, and I cannot claim an alibi there, for I have been a New Englander from Colonial days—although not exactly literally. A good many years ago when I was younger, and more foolish perhaps than I am today, I joined the Daughters of the American Revolution, not that the joining was a sign of foolishness. In looking up my rights and privileges therefor, I discovered—as most American families have discovered—that we came from the time of William the Conqueror; whereupon my small brother went to school the next morning and made the rather startling announcement that we were heirlooms from the time of William the Conqueror.

Many times, I suppose, the Presidents of Women's Colleges feel the responsibility of all womankind resting upon their shoulders, when they arise to speak in public upon the stage. It is the first time that I have felt the responsibility of all New England resting upon my shoulders. It is quite enough to feel the responsibility even of Massachusetts. A number of years ago I was so happy as to be one of a group of people who went to the Southern Education Conference, one day entertained at Charlottesville. One of the members of the party, a well known woman from the town of Cambridge, Massachusetts, was asked by her hostess, "Are you from New York?" And she very modestly—modesty is a characteristic of Massachusetts, you know—she very modestly answered: "No, I am not from New York; I am from a rather small town in Massachusetts called Cambridge." Whereupon the good lady said in a commiserating way: "Oh well, my dear, you must not feel at all bad if you *do* come from a small town; you must remember that Massachusetts is a mighty big state." I come to bring greetings from the "mighty big state," which numbers among its towns the small town of Cambridge.

Last year, I had the pleasure of being with this Association at its meeting in Chicago and I was much impressed then by the inspiration of the gathering. We ought to feel more inspiration this year, both from looking backward and from looking forward. We have heard a great deal about the Pilgrims within these last months; so much that some of us when we have been obliged to speak about them, have had to search far and wide, frequently without success, to find a new thought or what passes for a thought, as President Richmond has so aptly expressed it. Nevertheless I venture to remind you that the emphasis which the Pilgrims and the Puritans placed upon education should be an inspiration to us. Within about fifteen years this country and the part of the country known as New England will be celebrating the 300th anniversary of the founding of Harvard, the first college. Fifteen years after that little band of English people had

landed in Plymouth, the Puritans in and about Boston started an institution of higher education.

Even more, it seems to me we should find inspiration in looking forward. Every year for the last six or seven years, we have faced staggering problems and I think you will agree with me that in no one of those years since the fateful 1914 have we faced a time more fraught with perplexities, and things to conquer, than today. I have been indulging in a perfect orgy of meetings in New York this week and I have been impressed anew with the significance of these meetings—this afternoon the National Foundation for Health, established by women; yesterday, the National Board of the Young Women's Christian Association. At that meeting we had two representatives from Italy and France, to tell us something of the accomplishment of that great organization under most difficult conditions. The thought of the contribution which we are able to make through college training, not only to America, but to the world, ought to be an inspiration.

What is our contribution? For my answer, my thought has gone back to a story which I heard President Andrews of Brown tell of an incident that occurred when he was Professor of History at Cornell University. The United Granges of New York State visited Cornell during vacation and the faculties and committees did everything possible to make the visit an interesting one. Doctor Andrews had been with a little group of farmers to the laboratories and libraries and classrooms, and after spending several hours in this tour of investigation, one of the farmers asked with a perplexed expression, "But where is the college?" After all, the *college* consists not in buildings or equipment, but in the life which goes out from it to the world. Our contribution is in the output, the young men and young women whom we are sending from our doors, to have a part in this tangled world; to help knit up again that intricate web called civilization.

The conception of the mission of the college places a great responsibility upon our shoulders. May I turn again to a remark of Doctor Andrews'—his students never forgot

what he said, for some strange reason. "With all our increased equipment, our finer buildings, our larger plants, our more intricate organization—are we producing an output commensurate with the increase in other lines?" It behooves us to stop and think in this time of great need, whether the output is commensurate with what we are putting in, commensurate with the need of the world.

To go one step further—what is the first essential in the shaping of that output? Not the buildings, not the equipment, of course we all know that—but the faculty. And may I say here that I think it is well that we stop to consider today whether in our zeal for material things, we have not been putting a wrong emphasis upon our college faculties. President MacCracken, in an article in this month's ATLANTIC, discusses at length what I have in mind. Teaching is the greatest profession in the world. We must give to the young people of today, who will fill our college chairs tomorrow—if they will—an ideal of its dignity, its worth and supreme importance to the future, not only of America, but of the world.

We do have to work for the material things, alas. I think every college president in this room will second the "alas," because it takes time and strength and energy and thought and devotion, which ought to be going into the end for which we are working, and not into the means to accomplish the end. But let us not forget that the real thing consists in the human values, the students and the faculty. We must make the public realize that men and women who are dealing, not in material things, but in the things of the spirit, are performing a service of incalculable value for the world.

My message tonight is a message of congratulation, congratulation that we have the inspiration of the backward look, and also that we have the inspiration of the forward look, to that which is difficult, but worth the doing. The greater the difficulty, the greater the inspiration. And we must not forget that our real contribution lies in the human personalities of the student and of the teacher."

IV. James R. Angell, President, The Carnegie Corporation, New York City.

It is a very great pleasure on this first occasion where I have appeared in my capacity of reformed college professor, to address a college gathering. I feel a little like Daniel in the lion's den, for I notice in the audience a number of hungry faces that I have had the pleasure of welcoming in my office during the last few days. I have enjoyed very greatly, from one point of view, meeting the College President as it were "at the other end of the telescope." For twenty-five years, I have gone into his office to ask HIM for things. Now, I find him sometimes coming into my office to ask ME for things; but I find he sings exactly the same song that he did before—that he is broke.

Well, be that as it may. I have not as yet lost my very personal sense of interest in educational problems; and I feel very much more at home in a gathering of this character than I do in some gatherings in which I have recently found myself.

I have felt a good deal relieved by the latitude in which my predecessors on the program have indulged themselves, in their adherence to the alleged topic of the evening. As is usually the case, the one woman on the program was more conscientious than the males, and stuck much more closely to her text than did they. I shall venture, however, to follow my kind and the very few observations which I have to make will be brought into the subject of the evening only by some stretch of your courtesy and imagination, upon both of which I know I can depend. The three or four things that I have in mind to say are things which have been brought home to me with very great vividness during the few months of experience in my new duties in conversations with heads of colleges and universities from all parts of the country. The impressions have grown in vividness, as time has gone on, and I venture to pass on two or three of them to you for whatever they are worth. They are trite enough in their essence, but when you meet them day by day, and, as I have said, from all parts of the country, their cumulative force is very great.

The first point I wish to mention is this: I have been very much impressed in dealing with the questions which have been put before me, with the extent to which the average American College has NOT faced the problem of a limitation of its own numbers. Now, there are some institutions which, of course, have for a long time recognized clearly that they could only do the best type of work for a certain definite number of students. That obligation has frequently been based upon mere physical limitations. The dormitory space was not adequate to take in more than a certain number and they were obliged to house all their own students. Such institutions perhaps deserve no very great credit for their course in such limitation of their numbers. Others have done it because they felt that with their present personnel and equipment, they could not properly instruct a larger number of students, and they were unwilling to transgress the line at which they were confident that they could give a high grade of instruction. But in the great mass of cases there has apparently been no recognition of any such obligation, or there has been the frank ambition to expand indefinitely; or, finally, there has been no thought about the matter at all.

I wish to urge that, however it may be, with tax-supported institutions, where a certain obligation exists to accept every young person who comes with the qualifications that the state has established, the institution on a private foundation has a very serious moral question to settle with itself when it accepts students beyond the point at which it can really give them what it pretends to give. This policy is frequently found combined with a constant financial deficit, which seems, indeed, to be the chief article of diet in some of our colleges. I find it difficult to understand how, year after year, a college can be willing to face an invariable deficit, and go before its public with that type of program if it can avoid it. I do not for a moment wish to be forgetful of the obligation which some colleges owe to a constituency which they may not be able altogether to satisfy. Nor would I be forgetful of the fact that there is much to be learned from anything which, even though it be not in fact

the case, looks like stagnation. I quite understand that; but I am also quite persuaded that we have come to the time in this country when it is one of the very great obligations resting on the leaders of education, like you men and women gathered here tonight, responsible for particular educational enterprises, to make it clear to your communities, to your constituents, that your first obligation is to do, on the very highest level that you can, for the number of students that you can properly handle, the task which you have undertaken to do; and not to move forward quantitatively, not to try to handle a bigger number, until you have in hand the resources to do so on exactly the same high level.

I will not say that there may not be exceptions, but in general I believe that, that is pretty sound doctrine. A good many of you I know agree with me, because a good many of you are running your institutions on that principle; but a good many of you are not. The fact that you have suddenly dropped upon you on a September or October day, more students than you ever had before and more than you can possibly take care of creates a grave temptation. To yield to it involves serious dangers. It generally means securing inferior emergency instructors; it means over-loading your faculty; it means over-crowding your laboratories; it may mean stretching the budget to pay more men than you have money for, all results which breed trouble and undermine efficiency, both in your faculty and your student body.

Allow me to pass to another point. All over the country, from Washington to Florida, and from Southern California to Maine, literally the same story comes into my office, and with very, very few exceptions—"we are crowded beyond all possibility of handling the students that come to us. We must have more money; we must have a new chemical laboratory; we must have three new dormitories; we must double the size of our library; we must do this or that other thing, otherwise we can not accommodate these young people. We can not turn away 150 or whatever the number is, and the numbers are very large. What can we do?"

The answer, of course, to these questions at first, seems to involve a flat contradiction of the proposition that I just framed on the other point, to-wit, the wisdom of restricting numbers. If we do not take these young people who come to us, say the executives, what is going to happen? You can hardly deny them a college education, if they have asked for it and deserve it. Are you going to send them to some of the big and already over-crowded institutions; or are you going to send them to some institution where they will receive an inferior education?—what ARE you going to do about it? Many of the colleges on private foundations have undoubtedly been very greatly embarrassed in this manner, although nothing like so seriously embarrassed as the state institutions. Some of the latter have been absolutely flat on their backs.

I think the reply to this entire question, so far as there is a reply, is that while the crisis is at the moment undoubtedly grave, our real job is the education of our constituents to the fact that we literally have not at the present time in this country adequate educational resources to take care of the young people who are knocking at the doors of the colleges. That is the actual fact, and the public really does not understand it. Moreover, the public imagines that every new student who comes to an institution is an asset, not only educationally and morally, but financially. You gentlemen know that frequently this is not true at all. He is often a liability, and the more there is of him the more liable you are. The public is not generally aware of the fact that a student's tuition does not ordinarily pay what it costs to teach him. The more students you have, the more prosperous the public supposes you are.

You know, of course, how very much more serious the condition is in secondary education, particularly in our big cities, where literally there are thousands of children who are getting only a shadow of the education which they are supposed to receive, because the facilities are inadequate to take care of them, but the colleges are in much the same position, and it certainly is part of our job to make that situation perfectly clear to our public.

At the present moment the college is booming in the public mind, and every young person who can get there is trying to do it. That is going to continue, and probably increase. The moral of that fact is perfectly clear, not only that the present conditions have to be met, but that you have to plan for a very much more serious condition in the near future. You need not only more teachers, more buildings and more equipment, but you must pay your present staff higher salaries, for you cannot do high grade work without high grade men and such men cost money. You have to train the public to understand that if a democracy wants higher education for anything like all of its people [and they are increasingly demanding it], you must greatly augment the resources which at the present time are available.

How then can I reconcile the two propositions which I seem to have propounded first, that it is, in my judgment, an obligation on most of our colleges to set for themselves a limit on the number of students which they will undertake to handle in any given period of time, e.g. a decade; and, second, that there is a demand for a vastly greater amount of accommodation in colleges than the present resources can care for. Well, I do not suppose there is any single answer to this question. If there be such, I do not know what it is. Enlarge the institutions? Yes, undoubtedly; that is part of it. Create new ones? Yes, in some parts of the country, undoubtedly. There are some portions of the country in which they are very much needed. Build up colleges on the basis of our high schools using the junior college principle? Yes, in some parts of the country undoubtedly this is a sensible and rational thing to do. It will take time to do it, but it can be done. Shall we go on enlarging our great universities, already so flooded with students, that it makes your head swim to go into them? Possibly; but we have certainly got to split them up in some fashion. If they are not going to be mere beehives, if they are really to be human establishments at all, we have got to do something to disintegrate these great masses of students in some of the bigger institutions. I

am only sure of one thing and that I have already said, i.e., that we have to educate our public to the recognition of the fact, that if it is a good thing in a democracy that higher education should be as widely disseminated as possible, then democracy has got to pay the price for it, and to pay far more than it has paid up to this time.

There are some people, among them very successful individuals, who do not think that every young person who wants it ought to have a college education. My feeling about this is that if we had a sound principle of educational selection by which the fit could be kept in college and the unfit kept out, I would be willing to take a chance on it, and say that only the fit should, as a matter of fact, have it; but at the present time, we have not the selective agencies. There are colleges filled with young people who are languidly assimilating some semblance of intelligence and showing absolutely no sign of permanent infection, and in other institutions there are young people who are eagerly struggling to get the same thing. As long as that situation exists, and we have not any adequate principle of selection, I would rather take the chance of letting in all who wish to come, and assume that in the long run, in a democracy like our own, we shall in this way get a better result, because if you do not, it will mean almost entirely an economic selection, and that I believe to be most unwise.

My third point is very brief. I have been much impressed as I have met these men from all parts of the country, with the great variety of educational enterprises that are going forward and with the very great value of that mere fact of variety—the richness of educational experience, which comes from aiming at different ideals, and doing things in different ways. I should feel it most disastrous in the present condition of American life and education that we should be in the slightest danger of running into purely stereotyped forms of educational organization. We are in a period in which we can not too genuinely welcome any sincere, intelligent, experimentation. We all are cognizant of the limitations and short-comings of what we are trying to do in our several institutions; but we know

that each of these institutions has a characteristic life of its own; that each gives something of peculiar value to its students, which no other institution gives in just the same way; and it is perfectly clear to me, as I meet and talk with these men who are trying to do different sorts of things, and in different ways, that, in the long run, the country is going to be immensely profited by having a great variety of substantial, sincere educational experimentation. In education, as well as in nature, variety is of enormous advantage, in order that we may have a wide area over which the principles of natural selection may operate and may try out what, in a democracy of our kind, are really the most useful types of educational organization.

If I may recapitulate briefly then, I have urged three considerations: first, that there is a certain obligation resting on the ordinary college to lay out for a definite period of time, a program which it will not expand until it is able to make that expansion in a thoroly substantial way; secondly, that it ought to train its own constituents in so far as possible to an understanding of the fact that the problem of higher education in a democracy at the present time is one that requires resources the like of which we have not yet begun to appreciate; and finally, in the solving of that problem, we need a great variety of institutions and a great variety of experiments; and it is obligatory on us to be open-minded and to encourage any sincere, intelligent, educational experiment.

THE PURPOSES AND DEVELOPMENT OF THE COMMONWEALTH FUND

Max Farrand, General Director

The Commonwealth Fund was organized in October, 1918, under the Membership Corporations Law of the State of New York, and had its inception in the offer of a gift from Mrs. Stephen V. Harkness of securities of an approximate value of ten million dollars. One year later Mrs. Harkness made another gift of securities to the amount of something over six million dollars, and The Commonwealth Fund thereby has an income of approximately one million dollars per year.

One of the excellent features of the Articles of Incorporation is that the only restriction upon the use of the income and, if the Directors see fit, of the principal, is that they should be devoted "to charitable purposes." So far as their purposes may be interpreted from their acts in the course of two years, the Directors of The Commonwealth Fund are not intending to confine themselves to any one line of activity. They are not inclined to enter the field of medicine and public health upon any comprehensive scale, perhaps because that field is already occupied, but this has not prevented their making minor gifts for specific purposes. In the field of education, possibly because they were immediately confronted with appeals which would have absorbed not only the income but all of the principal as well, the Directors have not made grants to educational institutions either for running expenses or for endowments, even of particular lines of work. Apparently in the belief that experimentation and demonstration are lines of activity for which philanthropic foundations are peculiarly fitted, the Directors have granted \$100,000 for the current year, and have reserved a similar amount annually for a period of four years following, to be used for the encouragement of educational research. This is in the nature of an experiment, and an Educational Research Committee has been formed for the administration of these funds. In a similar way, a grant and reservations of \$50,000 a year

for a period of three years has been made for the purpose of encouraging legal research. A grant of \$75,000 was made to the New York State Department of Education to enable it to make an adequate survey of rural education in the State.

In the field of social work, several grants have been made, and it has been found that these grants were tending—partly consciously and partly unconsciously—in the direction of child welfare. The Directors are, accordingly, investigating this field with the possibility of entering it upon a more extensive scale, and with a well devised program.

It is a fundamental principle of philanthropic foundations that their activities should turn in the direction of prevention rather than in the granting of mere relief, but, pending the adoption of definite policies and activities, the Directors of The Commonwealth Fund very wisely, in my opinion, decided that they would disregard this fundamental principle, and would grant relief in cases where the emergency seemed to warrant it, that is, they would not allow surplus funds to accumulate. Two large grants have been made in this direction, that is, large from the extent of our income. One of these was for the relief of the Armenian children, and the other for the relief of the intellectual classes in Central and Eastern Europe. These grants have accomplished so much that there is no reason for regretting the decision.

TYPES OF JUNIOR COLLEGES AND THEIR RELATION TO SENIOR COLLEGES

- I. David Mackenzie, Dean, Detroit Junior College; President, The American Association of Junior Colleges.

Plato was the first to voice the idea that all education is a continuous process, which comprehending the whole of life must continue thru life. Altho I know how discredited he is in these times and realize that much of his educational theory is wholly inapplicable to present day conditions, I venture to quote him because his truth is the basis of all sound educational theory and practice; but especially do I quote this precept because in it lies an explanation of the growth and success of the junior college movement. In spite of the many encouraging attempts of the last two decades at reorganization and improvement in all educational fields, attention still is most often directed to particular units in the system or to the development of certain types of schools and colleges. Education is not generally viewed as a whole, as an organic process in growth and unfoldment, and consequently there is a lack of complete integration and articulation of the parts. Current educational literature is characterized by a particularization indicative of the differentiation and isolation that exist among the various groups; and in practice we find academic exclusiveness and superciliousness. The liberal and vocational camps, while not showing the same hostility toward each other as in the past, have about the same estimate of each other as the Jews and Samaritans of old. The gap between elementary and high schools is not yet removed; and altho some of the barriers between secondary schools and colleges have been lowered, in some places even removed, such changes in my judgment are not fundamental and are even of doubtful value. The serious point is that there is still misunderstanding on the part of most of us as to the conditions under which other groups of teachers are working and misapprehension of the aims toward which they are striving.

The secondary school, because of its position as a connecting link between the elementary school and the college has been the one to suffer most from the strain placed upon it by the new conceptions introduced into elementary education on the one hand and by the increased quantitative demands of the colleges on the other. Furthermore in its effort to function in the double capacity of a preparatory school for the minority and a finishing school for the majority, it has been attempting the difficult feat of riding two horses at the same time. The situation is especially serious in the case of the public high schools. In the populous and rapidly growing centers the influx in numbers, the insufficiency in early training and the frequent lack of cultural background among the pupils has made it impossible for these schools to maintain their earlier uniform scholastic standards. The adoption of a double standard, quantitative and qualitative, adopted by all high schools that have continued to satisfy college entrance requirements, is at best but a temporizing expedient; neither will a complete modification and reorganization of the present secondary curriculum solve the problem. There is required such a readjustment as will extend and coordinate the training period of the adolescent. We have reached down into the elementary school, from which two grades have been taken; and now we are demanding of the college that it also relinquish to our educational control two of its grades.

The junior college and the junior high school are therefore developments of the same educational movement, viz., the effort to unify into one complete whole the entire educational process of the adolescent. There can be no question as to the validity and feasibility of this idea of a unified eight year preparatory or preprofessional curriculum; our only wonder is as to the length of time required for our conversion to it. Surely it has had long confirmation in England, both in her old established public schools and also in her newer secondary schools, as well as in the lycee and the gymnasium

of the continent. Just as abroad these schools are divided into a lower school for the younger adolescents and a higher school for the older group, so in our country the idea seems to be crystalizing into the organization of junior high schools for the former and a combination of senior high school and college for the latter. The ideal would be realized, in my judgment, if while under one administrative head, the four lower grades, i. e., the seventh to the tenth inclusive, were housed together and known as the intermediate school; while the four higher grades were grouped together and known by almost any appropriate name, provided it did not contain either word, junior or college. While the matter of name is perhaps a trivial consideration, the word college savors a little of the American vice of pretentiousness, and there is the further objection of taking it from its accepted connotation as a divisional part of a university. The word junior, as applied to both high school and college, is unfortunate, because in the mind of all adolescents there is in it the implication of inferiority. So perhaps we shall continue to use the name until some inventive word genius coins a term that will meet with general approval and acceptance. In practice, the ideal is never achieved and during the years of experimentation various groupings may well be tried. We are therefore likely to find junior colleges that consist of two collegiate years only, entirely segregated from the high school; and others, probably the more numerous, a combination of the two college grades and the two upper high school grades.

While present interest in the junior college movement lies mainly in its development from and connection with the high school and, therefore, with that type known as the public junior college, all familiar with our educational history know that there are two other types which in conception and origin are collegiate rather than secondary, and these demand our first consideration.

Although the division of the arts college into a junior and a senior unit, as is known to all, was the idea of one

of the great university administrators, its acceptance by other universities has been unexpectedly slow. Yet it is a recognition of wide spread belief that the first two years of college are foundational; that they are merely introductory to the vast field of human knowledge and endeavor; and that their main purpose is to give the youth an opportunity of gaining self-knowledge, self-revelation, self-appraisalment. Such differentiation has among other advantages, the effect of placing the senior college more nearly on a level with the professional schools. This will not only hasten its apparent trend but will perhaps induce upper-classmen to approach their work with a degree of seriousness and a sense of reality characteristic of professional students. Furthermore the segregation and gradual curtailment of the lower unit will enable such an institution to approach the standard of a true university. So while the university type of junior college has served a most useful purpose as our model in respect to curriculum and scholastic standards, it may disappear since the popular demand for public junior colleges will certainly decrease, if not eliminate, the heavy lower-class enrollments characteristic of universities at the present time.

The second variation in type among junior colleges is also of aristocratic descent and has dropped down from its high association thru economic necessity. It is indigenous to the middle west and south, and for sustenance and support it is dependent upon the same sources that gave it birth, creedal and sectarian ardor, or private interests. Unlike the university type, however, it is increasing numerically with great rapidity. But the problems of the small college have been ably discussed in this and other educational associations and only from one angle is their future a matter for present consideration. Statistics reveal with what rapidity the virtual elimination of the senior unit in many of the small colleges is proceeding. Equally significant is the report of the Commissioner of Education, showing that approximately one-half of the six hundred or more institutions still maintaining a four-year curriculum have an income scarcely adequate for the maintenance of a

standard junior college. Before the bar of economic and social utility they have been tried and found to be wanting. The future classification of these institutions then is already a predetermined matter.

But the institution I wish to discuss at length is not a duplicate of either of the preceding; it is a new and distinct type. It has its own method of educational approach and while it is a development from a lower educational level, it is strictly collegiate as opposed to secondary in its content and pedagogical processes. It is not in any sense a graduate high school, neither does it make a pretentious claim to being a superior parallelism of the university freshman and sophomore unit. It is merely the peak of the public school system and while not apologetic, makes no ridiculous and audacious boasts of being anything more than it can prove itself to be.

The establishment of a college unit in connection with a high school, although it may entail on each some unfavorable consequences, is, first of all, an exceedingly economic arrangement, especially during its inception and infancy. In our larger high schools the administrative and instructional forces, the library and laboratory facilities, the class-room and other accommodations of the building will satisfy the initial requirements of such a college and so at nominal expense a junior college may be developed from any good and sufficiently large high school.

While there is no profound difference between upper high school grades and lower college classes either in the content of the curriculum, the method of instruction, or the mental attitude of the student, each year of instruction represents an advance over the preceding; consequently, in organizing a junior college, there will be inadequate provision, if it is based on the erroneous idea that the junior college is without special educational problems—is merely an expansion of the existing high school to accommodate the increased enrollment. College teachers must have a wider knowledge and a larger preparation than has the average high school teacher; the instruction to measure up to the greater capabilities of older students must be direc-

tive and suggestive rather than analytic; and the library and laboratories must provide facilities adequate to the special needs of the several departments. The official estimates of many of these items of expense are misleading, unless they are to be regarded as initial expenditures only. In illustration of this point I may state that although our high school laboratories were as well equipped as those of the average small college and were therefore sufficient for the initial needs of our junior college, they speedily required enlargement and increase in equipment. On our physics laboratory equipment we have been spending \$1,000 a year and in chemistry and biology, several times this amount. These are fundamental requirements that may not be overlooked in the organization and development of any junior college worthy of the name.

All realize that in every educational institution the teacher is of more importance than all else combined. And it is my conviction that one of the important factors in the success of the public junior college is the type of teacher that has fortunately been attracted to it. Its general policy has been to obtain as teachers, men and women who are superior in teaching ability to the instructors that in universities are generally assigned to under-classmen. As research brings both renown to an institution and distinction to the individual, it naturally is the goal sought by an ambitious young university instructor, and any gift of teaching that he might possess not only remains uncultivated, but is even looked upon as a hindrance in the pursuit of professional reputation and advancement. Under-classmen in the four-year colleges too rarely meet a great teacher; often he is only an indifferent drill-master or at best simply an instructor in the literal signification of the word. The first qualification in all teaching is interest in the subject taught. Interest takes precedence over scholarship, because where there is genuine interest there is bound to be adequate scholarship. In the junior colleges we do not overrate degrees, neither are we indifferent to their value. The Ph.D. is not an open sesame to appointment in our institutions. On the other hand, he who has not done as a minimum of

graduate work the equivalent of the requirement for a master's degree, is not acceptable to us. Furthermore in our institution we prefer one who has university teaching experience in order to remove any doubt as to the scholarship of the teacher or the instruction of the student.

Owing possibly to the great size of their classes, too many college instructors seem devoid of human interest. Small classes make possible the cultivation of a personal relationship, suggestive of the big brother idea of intimacy and helpfulness, which reduces scholastic and moral failure to a minimum. Is not the superficial and perfunctory interest shown by many college students in liberal studies merely their reaction to the purely academic attitude of their instructors? "Surely the love of knowledge no less than that of riches may corrupt the soul," to draw again from the wisdom of the Republic—and youth's primal interest, if uncorrupted is like humanity's, to understand life's mystery. May not the apathy he frequently displays be the measure of the failure of his teachers to throw light upon the solution of his deepest problems? Under-classmen are at a most susceptible age and need the guidance of teachers of the widest experience and learning; here, therefore, is the most flagrant error in university policy. Ambitious to expand and increase the size of its student body, nearly every one is enrolling a much larger number of students than that for which it has proper instructional facilities, and, in consequence, to the incoming freshmen are assigned tutors, who in age, experience and general knowledge are superior to them only by the smallest of margins. Why, may I ask, should these colleges undertake a problem that they manifestly are unprepared to solve? Even in the smaller colleges scholarly interests and ambitions are so absorbing that they seem to despiritualize professors and transform their classes from living personalities into simple "students."

While the four-year colleges and universities undeniably enjoy advantages in the way of social, academic, and professional prestige and opportunity which make a strong appeal to young teachers, the junior college is not without

some, perhaps compensating, conditions. In the matter of salary a city institution can afford to be generous. But it is not on better salaries alone that the junior college must rely in making appeal for earnest teachers; surprising as it may seem to some of you, there are other inducements. Teachers formerly connected with large colleges are impressed with the fact that the student body in junior colleges is unusually serious and earnest. The partial explanation is that the majority of these students are in modest circumstances, are making sacrifices in order to secure an education, and therefore prize the opportunity more fully than do the wealthier students, who, sent to college at the expense of well-to-do parents, are more interested in the social side of college life than in scholastic efforts. Another consideration is the independence and freedom from petty department control that our teachers enjoy. The junior college is untrammelled by traditions and precedents; academic rank and seniority have as yet gained no footing; everything is a matter for experiment and trial; a teacher with enthusiasm, originality, and initiative has unusual opportunity therefore of developing his teaching methods and impressing his ideals upon the unprejudiced and open-minded student body.

As all who are graduated from high school are not of college caliber, and as frequently even the dullest of them are eager to go to college, it might be inferred that the absence of entrance restrictions would force us to adopt the wholesale dismissal practice so prevalent in large institutions that admit several times as many freshmen as they can properly instruct. Such, however, is not the case; forced withdrawals at our request are rare occurrences. When a student's preparation is inadequate in a given subject as sometimes happens in English or mathematics, he can be transferred to a high school course in composition, or algebra, which is an easy matter where school and college are in the same building. On the other hand in such subjects as chemistry, physics, and advanced algebra, in which there are always students without the necessary high school preparation, sections are formed for a rapid

survey of essential principles and facts. Then there is the type of student familiar to every teacher through the whole educational system, not quick in perception, not retentive in memory, and not keenly discriminating in his logical processes. He is, however, eager for knowledge, earnest in his efforts, and determined and persistent. By what right, may I ask, does the college instructor stigmatize such a youth as intellectually incapable, regard him as an academic intruder, and ruthlessly deny him the privilege of a higher education? In the case of such a student the time element is the difficulty; the remedy is to lighten his load. If he is unable to carry the normal load of fifteen semester hours, he may achieve real success with a less number. There is, it seems to me, a serious ethical question involved here and the public is justified in criticising the policy of many colleges in this matter. No one will deny the right of an educational institution to protect itself against the influx of the incompetent, and to determine by examinations and other reasonable methods the qualifications of entrants; but after granting admission to such students as comply with their requirements, they are morally obligated to make every effort to give them the education for which they have come and for which they are paying.

From time to time we meet students who object to going to a *junior college*; they declare that they wish to go to a *real college* or to none. Discussion of this point shows that their objection is based upon the fact that the junior college is not sufficiently detached from the high school and upon the belief that in such an institution there is necessarily an absence of college life and college atmosphere. The latter statement is, of course, in a measure true, and is a serious defeat. Upper classes, tutorial and professorial instructors, classic structures and stadiums, fraternity and sorority houses, activities and organizations, academic traditions and customs, intimate associations and friendships, all of which make up that entity we call college life, count for much in the higher education of youth. While resident students even in a city university are deprived of some of the delights of the social side of college life, in a public

junior college they are necessarily denied many more of them. To meet this deficiency the junior colleges have introduced such activities as have social and educative value, as far as conditions permit. They seem to be meeting with fair success in the different college sports; some of them are issuing student publications that compare favorably with many of the older college publications; they may have Glee Clubs, debating, dramatic and literary societies, and through dances, assemblies, and other functions in which parents may participate, furnish a wholesome social life that centers around educational interests. Many of us, I know, are apt to grow pessimistic over the excessive enthusiasm and energy that the student body displays in his extra-curriculum organizations and activities. For many youths, I admit, these are futile and demoralizing; for perhaps the larger number of students the most that can be said is that they provide a harmless form of recreation and entertainment; but for the active participants they are more truly educative than much of the formal instruction of the class room. The interest and effort they awaken, the energy and labor they require for realization, the practical training and experience they furnish because of their close relation to the work of the world, are all valuable factors in the educational process. In fact, I sometimes wonder whether a twentieth century Froebel may not appear, who will discard the formal studies and methods now in use and substitute therefor activities for which adolescents have such an interest—instinctive and perennial.

The incorporation of a junior college as a unit in a public school system implies the abolition of all entrance requirements other than graduation from a high school. The fact that in four year colleges, students are admitted only on examination or on certification puts our college at a disadvantage as to scholarship. For, naturally, those graduates of high schools who are refused certification on the ground of inferior scholarship or inability to meet the college entrance requirements, enroll with us. We have, therefore, each year a varying quota of students who, according to the accepted standards, are unprepared to do

creditable college work. Furthermore, we have sent to us also students who, in the judgment of parents and teachers, are too immature to be deprived of the restraining influence of the home, and to be subjected to the distractions and unaccustomed environment of the large college. Our own experience in this matter is not discouraging. During our first years we regarded it as a severe handicap, but were stimulated thus to greater effort; and as we gained in reputation, we have attracted each year a larger number of the abler, fully prepared graduates from the different high schools of the city and adjoining districts. Fortunately for us, too, as is likely true of others, even from the beginning we enrolled a goodly number of bright and clever students who for financial reasons were prevented from going to college. In the matter of marks and grades we were exacting from the first; consequently our students in transferring to other institutions found not only that their preparation was adequate but obtained higher grades from a less amount of study. Most of our state universities and other accrediting agencies have given official endorsement to the junior college movement and are frankly appreciative of the creditable results already obtained. With the senior college and the professional schools the articulation is surprisingly close and complete. Upon transfer to the higher institutions our credits are with very few exceptions accepted at their face value. In social readjustment also, which owing to the complexity and variety of interests might be expected to present difficulties, there is absence of criticism from students and university authorities alike. The only exceptions in this matter of accrediting that have come to my notice are from the department at Albany and from some of the colleges affiliated with the New England Accrediting Association. The former seems to be disturbed over our lack of power to grant the traditional baccalaureate degrees, and the latter merely show their customary hesitancy over educational innovations and advancements that originate outside their circumscribed world.

If the junior college, because of its inherent advantages, can secure better results, as it now seems to be doing, on

the testimony both of students and of educational authorities, than do the universities and larger colleges, it is not unreasonable to assume that in the future with its better organization and fuller development it may accomplish in its two-year curriculum an equivalency of the three year curriculum at the universities. This is an assumption of some importance in view of the present tendency in liberal arts colleges to reduce the requirements of the baccalaureate degree to three years. While this is now a privilege extended by practically all universities to certain professional students, as a concession to the demand that the time for professional preparation is too prolonged, may not this privilege in time be extended to students in all professional and technical courses so that the baccalaureate as a preliminary or concurrent requirement will be reduced to a three or two year content period? The junior college will then represent in its curriculum all that will eventually be required for a general, cultural, and preprofessional education, and will be authorized to confer a baccalaureate degree indicative of this attainment.

Thus far public school effort has been directed mainly to the establishment of the standardized type of junior college, in which are offered the customary foundational courses as preparation for the senior college and professional schools. It is strictly only a preprofessional school, but seems to be the type of junior college that has won the approval of school officials, and will constitute the apex of the educational system in all moderate sized communities in the near future. In the larger commercial and industrial centers, as well as in many agricultural communities there may appear another type, strictly vocational in character, varying according to local needs. The demand for practical education in our country is still insistent, although it must continue to be largely a matter of experimentation since there is no definite agreement as to what subjects are real contributing factors in this training. Some years ago vocational training in the non-professional sense was regarded as a secondary school problem and a variety of commercial, domestic, and mechanical courses were introduced

in these schools. But they have had a value, liberalizing rather than vocational, since high school pupils must enter upon them without the actual practical experience required. This demand for vocationalizing education is now permeating the colleges, one result of which has been the introduction of courses both in arts and engineering colleges whose purpose is preparation for managerial control of business and industrial concerns. Objection to the vocational type of junior college is made on the ground that the work is likely to be of secondary school character, but if collegiate work is distinguished from secondary mainly by a greater breadth and intensity of inquiry, why is there any more danger of the application of science to these problems sinking to a low level in a junior college than in the first years of the full-fledged colleges of agriculture, commerce, and technology?

But the future expansion of the junior college does not lie either in the preprofessional or vocational fields. In every city there is a class of fairly intelligent and truly aspiring men and women, who, although unable to meet the typical college entrance requirements, can with self and societal profit pursue many collegiate courses. Of this the popularity of University Extension work both in this country and England is confirmatory. Municipalities owe the privilege of higher education equally to all groups of its citizens who desire it. The very perpetuation of democracy demands a higher degree of intelligence in its citizenry. The percentage of college-trained men and women throughout the country today is too low to maintain intelligent governing bodies. Destructive radicalism spreads only when there is not intelligence sufficient to combat it. Youths with such tendencies, as has often been observed, will become tolerant and moderate thru the study of world history and political science, and the opportunity afforded for a free discussion of social and civic problems. And perhaps many of the radicals in the world, who are advocating violence and revolution, require only the illuminating and revealing light of history and science to be convinced of the futility of their theories.

In spite of belief to the contrary, there are still some adults who think, and who aspire to clearer and wider thinking. It is from these that the public junior college will get its clientele. Evening and day school courses should be offered of such variety in character and purpose as will attract every man and woman desirous of improving his general intelligence, his vocational status, or his value as a citizen. In the cultural and recreational list should be found courses in foreign languages and literatures, drama and play production, philosophy and ethics, hygiene and sanitation; to encourage vocational interests there must be courses in the scientific aspects of banking, exchange, foreign exports, and other features of business leadership; and finally there must be efforts to create worthy leaders of public opinion, efficient governmental employees, and practical co-operation with all governmental bureaus and welfare agencies throughout the city.

In these ways will our junior colleges become real educational channels, actualizing in the real the common precept of Plato and the modern self-determinists alike; giving to the worthy and ambitious youth his rightful heritage, a mental, moral and executive education that will enable him to solve his problems according to ethical principles instead of social traditions; and to the adult a renewed, intelligent and continued interest, civic and social, and so by these returns to the community justify their cost and us who see in them the hope of Democracy.

II. Wilson Farrand, Head Master of Newark Academy and Chairman of the Committee on Junior Colleges of the National Conference Committee on Standards.

I have no trepidation whatever in appearing before this august body as a schoolmaster. New Jersey schoolmasters, as you know, usually have their nerve with them, and I have a firm belief that the secondary school is superior to the college. I am nervous, however, at being introduced as a trustee. For a college or university trustee to appear in that capacity before an audience made up of presidents,

deans and professors, is a very audacious proceeding, and I hope that you will understand that I am speaking today not at all as a trustee, but simply as a schoolmaster or as a student of education.

If I comprehended Dean Mackenzie correctly, his fundamental plea was for the adjustment of our academic ills by the prolongation and extension of the secondary field of education. I firmly believe that there are ills in both our higher and our secondary education. I recognize clearly the unfortunate break in the transition from school to college. I believe firmly in the importance of secondary education, but from his position that what is needed is the prolongation of the secondary field I want to dissent in as strong language as it is possible for a man to use in dissenting from the views of another. In the course of my remarks I may drop a few kind words in regard to the Junior College, but I am anxious to have no misapprehension, and I do not wish the fact that I may drop some words of that kind to be interpreted in any way as even a partial agreement with his fundamental position that the secondary field of education ought to be extended.

The American college is an institution *sui generis*. It is unlike any institution in the civilized world. It differs decidedly from the English university, and still more from the Continental university. It was organized in this country for the purpose of developing and training leaders. At the time at which it was established the leaders in American life were the clergy, and the American college was established primarily for the purpose of developing and training clergymen, who were expected to be leaders in American life.

As our country developed, and as the leadership gradually passed from the clergymen to men in other fields of work, that is, when the ungodly middle and southern states began to get in their influence on pious New England, the college began to change and began to train leaders in other fields. It has developed much since that day, but its primary purpose all thru has been to train chosen men and women to be leaders of American life and thought.

In this gathering I do not need to eulogize the American college. It has been one of our most precious possessions. It has been one of the most valuable factors in our educational scheme, and it is a thing that we cannot lightly lose or safely minimize.

I think that it was Henry Van Dyke, who is more a man of letters than a college professor, altho he is both, who said that one of the points that distinguishes the American college from the similar institution in other lands is its capacity to inspire in its students the quality of romantic love. That sounds rather fanciful and poetic, but there is in it a germ of genuine truth, for in some way the American college has gained such a hold on its students that it has created in them the feeling that they have gained from it something that they could not have secured in any other way; something that is not to be measured by credits, semester hours, or counts. I think that the highest eulogies I have ever heard passed by any students on the instruction that they have received have been in regard to the Harvard Law School and the Johns Hopkins Medical School; but in their highest eulogies I never heard those men express one-tenth of the enthusiasm that they have expressed for the college which has really touched their hearts and their souls.

The first point that I wish to make is that the American college is one of the most valuable factors in our American education, is one of our most precious possessions, and is something that ought to be preserved and strengthened at any cost.

The second point which I wish to make is that the Junior College supplies a genuine need, and is undoubtedly here to stay. It arises, as I conceive it, from three different motives, and two of those three, at least, are legitimate and praiseworthy.

In the first place, the Junior College sometimes arises to supply a local need for what may be called post-high school instruction. There often are boys and girls who for one reason or another wish to carry on their studies beyond the high school grade, and it frequently is not prac-

ticable for them to go away to college. If local facilities can be provided to meet their needs, it is often a distinct advantage; and the meeting of such a need is a legitimate cause for the establishment of a Junior College.

A second cause is to be found in the congestion in our large universities, in the over-crowding of many of our institutions, in the great growth in numbers, and in the troublesome problem of the freshman class. In some of our universities the size of the freshman class is simply appalling, and in most of our larger universities the weakest spot at the present time is to be found at the beginning of the course, in the initiation of the new student, in the transition of the freshman from school to college. The Junior College may sometimes arise to meet this problem of numbers, and this also is a legitimate reason for its establishment.

The third cause, which applies in many instances, is a desire to aggrandize the local system, and to magnify the school system of the city in which it is established. That, I submit, is neither a worthy nor a proper aim. It means the extension of the secondary field at the expense of the college, and the college is an institution that we cannot afford to lose.

There are three types of Junior College that have appeared in our country. The first is a division of the large college, the segregation, as it were, of the first two years of the course, and their maintenance as a separate unit. Such a scheme, for example, was proposed years ago by the University of Chicago, and actually put into practice. Such a division arises from a desire to grapple more effectively with the problem of the younger students, and to meet more successfully the difficult problem of the freshman. It arises from a feeling that the instruction in the earlier college years is different from that of the later years, and that there are certain advantages in handling it by itself.

You see something of the same movement in such a thing as the establishment of the freshman dormitories at Harvard. You see it still more clearly in the new plan at

Yale of a separate dean and faculty for the freshman year. Both these schemes recognize the fact that there are special problems connected with the early years of college life, and the establishment of a separate division of the college may be sometimes very desirable.

The second type of Junior College is the entirely separate institution, either a small establishment in the country, or a municipal institution. I have recently had occasion to study the qualifications of a number of smaller colleges in this general region. It is pathetic to see the struggles that some of these are making to maintain themselves as colleges with absolutely insufficient resources. They are not worthy to be called colleges, but they could often be strong junior colleges. There is good warrant, also, for the municipal institution. There is often good reason for a city college, or even a city university, and it is entirely conceivable that a city which does not need a four year college of its own may yet find good use for a Junior College covering the first two years of college work. It is conceivable that such an institution may be a very desirable thing, and may serve a very useful purpose.

The third type of Junior College takes the form of an annex to a high school. That simply means, in almost every case, an extension of the high school work. The high school principal becomes president of the college; certain of the high school teachers take over the work of instruction, carrying it on very largely with the high school facilities. I have no hesitation whatever in saying that in this country thus far the institutions of that type have fallen decidedly short of satisfactory results. More than that, I do not believe that they can possibly succeed. The college and the school are different institutions, and a first-class high school cannot turn itself into even a third rate college by simply extending its course upward.

There are two practical questions that arise at once. In the first place, should the Junior College be encouraged? In the second place, how far should Junior College work be recognized by our standard institutions and by our professional schools?

To answer the second question first. I think that we must say that every bit of work done in every such institution, that is equivalent to the work done in a standard college, should be accepted and credited, but that work ought to be tested by just as vigorous standards as we apply to our standard colleges and to our regular universities. Personally I do not believe that a boy will get as good an education by spending two years in an institution of that kind, tacked onto a high school, as he will in a genuine college, but in so far as the work can be shown to be equivalent, I do not think that we have any right to refuse it. It must, however, be proved that it is equivalent academically, and that the students are fitted to go on with higher work in regular colleges and universities.

The other practical question is how far should the Junior College idea be encouraged?

The Junior College, as a division of a large university, should be encouraged wherever the local conditions make it desirable, and wherever such a division will work an improvement. That, however, is a problem for each individual institution to solve for itself, and is one with which we are very little concerned.

I believe that it would be for the best interests of this country if many of the small institutions with weak resources, which are making themselves second and third class colleges, were to come out deliberately and make themselves first-class Junior Colleges. It would be an advance in our education, and would strengthen higher education rather than weaken it.

There is room, also, undoubtedly for municipal Junior Colleges shaped primarily to meet local needs. The primary aim of those institutions, however, ought to be to meet these local needs, which are most often vocational. To meet these local needs ought to be their underlying purpose, not to supplant or to take the place of the regular college. If I understood the paper rightly this morning, the logical outcome of the plan proposed would be not only the weakening of the college, but would be eventually the stifling of the college. If that should ever come, it would

be one of the worst disasters that could happen to American education.

We have still the question of the third type of Junior College—the high school annex—and that, in my judgment, can never be the equivalent of the separate college. It may be tolerated for a time as a step toward something else, but I believe that no such annex can attain a dignified and worthy position until it becomes an independent institution, with its own building, its own equipment, and its own faculty. As long as it remains an annex to a high school, it must perpetuate the secondary spirit and the secondary method. That would be as great a misfortune to us as it has been to Germany, where even the keener German critics are recognizing the fact that one of the defects in their educational system has been the undue prolongation of the secondary period.

The Junior College is here. It meets in many cases legitimate needs, and therefore it is here to stay. We ought to encourage, where it meets legitimate needs, the division of the higher institutions. We ought to encourage, where it meets legitimate needs, the separate Junior College, whether in the country, or as part of the municipal system. We shall have to tolerate, I am afraid, to a certain extent, and I hope only as a temporary measure, some of these institutions that are annexes to local high schools, but to advocate the extension of our secondary system to cover the first years of college work is, I am prepared to say without fear of contradiction, an educational fallacy of the most serious type. To try to persuade boys and girls to choose that kind of education and that kind of training, instead of the regular college training, and to try to persuade them that in so doing they are getting something just as good, or superior, is, to my mind, essentially dishonest, and an educational crime.

REPORT OF THE ASSOCIATION COMMISSION ON FACULTY AND STUDENT SCHOLARSHIP

I. Frank Nicolson, Dean, Wesleyan University.

The word standard implies measurement, and the idea of measurement invites comparison. It would be interesting to compare the average scholarship of the modern student with that of fifty years ago, or the Eastern standard with the Western, the North with the South, or the scholarship of men as compared with women, or those admitted on examination with those entering on certificate, or to compare results achieved by students trained in the ancient classics with those obtained by products of the modern school. But these comparisons are difficult to make and probably the result, interesting as it might be, would not justify the labor.

In discussing standards of student scholarship, one is tempted to follow the line of least resistance and blame the students. They have been the subject of attack for many years and from many quarters. Their wanderings from the main tent to the side shows have been commented upon by an experienced educator whose exalted position has given his words additional emphasis. Their passion for intercollegiate athletics, their craze for dancing and the movies, their waste of time and money in automobiling have been emphasized by many critics, who have not failed to point out the lack of earnestness of the modern college student, his avoidance of serious topics, his painful ignorance of national and international politics, and his demand to be treated as a man while his acts are frequently those of a child, and often of a very immature child. But, granted that the modern American college student is often a careless, happy-go-lucky individual, wasting his opportunities and looking upon his college as a social club, indifferent to the efforts of his instructors to inspire him with a love of scholarship, this report will not heap further reproaches upon him, but will direct itself rather to the question whether the college itself is in any sense to blame. It is safe to assert that no faculty is satisfied with the product it turns

out. At least a third of our graduates each year are not, in the judgment of their instructors, educated men, in the sense that every holder of a college diploma ought to be. Conceding, then, that the material submitted to college teachers for instruction is not perfect, have the faculty done the best they could with it? How may we, as college administrators and teachers, improve the grade of undergraduate scholarship? If the college boy neglects his opportunities, are we making the most of ours? It is this phase of the question to which your Commission has directed its attention.

If held to an accounting on this point and bidden to examine his conscience, the college teacher can take refuge in one plea, arising from unusual conditions in the last few years. He may justly claim that he has not done what he might with his pupils because there have been too many of them. The recent rush of students to college has become a subject of frequent newspaper comment, and it constitutes a serious problem for the college administrator. A few statistics, gathered from three sources, will make plain the situation. Figures compiled by the United States Bureau of Education, covering three years 1916-19, show that in 250 colleges and universities in this country, about half of those listed by the Bureau, and including small as well as large institutions, there has been an increase from 150,000 to 190,000 students, over 25 per cent., and that, too, in a period when the country was at war and the colleges were subjected to serious losses. The gains in the freshman classes are even more noteworthy. Comparing the number admitted in 1919 with those of 1916, a percentage of gain of 46 appears for the whole country. The New England institutions report only 21.7 per cent. gain of freshmen, but the North and South Central and the South Atlantic states show 50 per cent., and the Western colleges and universities as high as 64.8 per cent., the state universities as a group reporting 61 per cent. of gain.

A newspaper item has recently attracted attention—a statement of facts, and a prophecy, issued by the Institute for Public Service. The writer reports that in 210 of our

the national statistics of 1920 were the figures of 1910. The increase in the number of students in the United States in 1920 was 100 per cent. The number of students in the United States in 1910 was 50 per cent. The number of students in the United States in 1900 was 25 per cent. The number of students in the United States in 1890 was 12.5 per cent. The number of students in the United States in 1880 was 6.25 per cent. The number of students in the United States in 1870 was 3.125 per cent. The number of students in the United States in 1860 was 1.5625 per cent. The number of students in the United States in 1850 was 0.78125 per cent. The number of students in the United States in 1840 was 0.390625 per cent. The number of students in the United States in 1830 was 0.1953125 per cent. The number of students in the United States in 1820 was 0.09765625 per cent. The number of students in the United States in 1810 was 0.048828125 per cent. The number of students in the United States in 1800 was 0.0244140625 per cent. The number of students in the United States in 1790 was 0.01220703125 per cent. The number of students in the United States in 1780 was 0.006103515625 per cent. The number of students in the United States in 1770 was 0.0030517578125 per cent. The number of students in the United States in 1760 was 0.00152587890625 per cent. The number of students in the United States in 1750 was 0.000762939453125 per cent. The number of students in the United States in 1740 was 0.0003814697265625 per cent. The number of students in the United States in 1730 was 0.00019073486328125 per cent. The number of students in the United States in 1720 was 0.000095367431640625 per cent. The number of students in the United States in 1710 was 0.0000476837158203125 per cent. The number of students in the United States in 1700 was 0.00002384185791015625 per cent. 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ing, we shall deceive ourselves, for the reasons are practical and chiefly economic. The cost of a college education is one of the few things that has not increased appreciably along with other items of the high cost of living; with higher wages, more people than ever, and especially more of the working classes, are able to educate their sons in college. Fathers observed during the war that the college men made good, that their training put them in the way of securing commissions, and gave them ability to lead rather than to follow. The attitude of the business world has changed greatly toward the college graduate; the business houses, the banks and the insurance companies that twenty years ago looked askance at the young college graduate with his diploma in his hand, are now sending agents to the college offices, asking for the names of promising seniors and offering a living salary during a period of training. In view of this new demand for college-trained men, it is not surprising that the number of applicants for admission is increasing rapidly.

The resulting burdens, especially on the state universities, but also on many of the colleges, are well nigh intolerable. The ratio of students to faculty is rapidly increasing. It is important, in considering the standards of scholarship, that this element of instruction should be carefully watched. A study by President Hughes of reports made by 500 colleges to the United States Bureau of Education shows a wide range, all the way from 3 to 42.5, but the most common ratio is 10 to 15 students to one instructor. Two hundred colleges show less than 10, only 97 more than 15, and of these only 31 have over 20. In this computation all officers of instruction seem to be included; if assistants and part-time teachers, who form a considerable part of the faculty of professional schools, were excluded, the ratio would be higher. Ten to one might be set down as the ideal ratio of students to teachers; more than fifteen to one is undesirable, from the point of view of developing a high standard of scholarship.

The crowding of our colleges has resulted in unduly large sections in many cases, with the result of forcing what is practically a lecture system, instead of the recitation plan,

upon freshmen. Lectures to the upper classes form a proper, sometimes the only possible, method of instruction; if used with freshmen, untrained in taking notes and unskilled in the proper use of the library, they should be supplemented by quiz sections or by some other form of personal guidance. One does not picture Mark Hopkins, on his end of the log, reading a lecture to a bored freshman on the other end. The Chautauqua system will never supplant the Socratic method of instruction. Education is a drawing-out, not a pouring-in. While an indefinite number of students may be properly admitted to a lecture section, if some form of individual assistance is provided, the number in a recitation section in languages ought not to be more than 20, and in a laboratory section it ought to be kept even lower. Not only the size, but the number of sections, also, has been increased beyond all reasonable bounds in some of the large state universities. It is reported that in one institution there were last year 60 sections in Freshman English, with several hundreds of students assigned to no section on account of lack of instructors. Such a state of affairs introduces serious administrative problems, and must leave the impression on pupils that they are being put through a sort of huge educational machine.

The rush of students to college tends of course to an immediate increase in the teaching load, unless additional instructors are added to the staff; and good teachers, in fact almost any kind of teachers, are hard to get these days. The standards of teaching hours set by the University of Washington may be accepted as the ideal maximum,—namely, 15 hours a week of recitation or discussion hours per teacher, this being equivalent to 10 hours of formal lectures or 30 laboratory hours, instructors showing ability in research, and those assigned to administrative duties, being given a proportionate decrease. As a matter of fact, statistics submitted to this Commission by Dr. Kelly, compiled from a study of 275 colleges, show that the hours of teaching per week in many colleges decidedly surpass the maximum suggested. About half the colleges covered his statement are listed by the American Council on

Education; their average minimum and maximum range of teaching hours per week is 11 to 17.7. The colleges not on the list show an average range of 14 to 19.9. Of those on the Council list only 48 (about one-third) report a maximum of 16 hours or under, while only 24 (less than one-sixth) on the other list make a similar report. It may be added that in a number of the stronger colleges no instructor is expected to teach over 12 hours a week, and the quota for the older professors is often 10 or less.

If the large increase of numbers admitted to college is to continue, it is obvious that steps must be taken to meet it, or else the standard of student scholarship is bound to decline. The problem is most serious for the state universities, as they must admit all who present the proper credentials from the high school. A report soon to appear from the United States Bureau of Education shows that the public institutions are growing almost three times as rapidly as the private colleges and universities. The endowed colleges, also seriously affected, have it within their power to adopt independent measures, and may be forced to do so in self defense. What are the possible solutions?

1. We may have more colleges. When we reflect on the handicaps of newly established colleges—lack of funds, unless generously endowed, inadequate buildings and libraries, the lowering of entrance requirements or weakening of standards in order to attract students from older institutions with greater prestige—it seems undesirable to follow this plan, unless it is absolutely necessary. In general, we need better, rather than more, colleges. The state universities may find their solution in the encouragement of junior colleges, and there is much to be said in favor of their restricting their work to the advanced work of the course, instead of duplicating the work of the best high schools in the freshman and sophomore years. Something is wrong in our educational system if it is necessary to teach beginning courses in French and German, even in Latin and Greek, in college. But, the junior college, if developed in a high school, is an inadequate substitute for two years of college. The teachers in a school, while they may have—

and often do have—a better knowledge of pedagogical methods than college teachers, generally lack the graduate training of a college staff, and their instruction is apt to emphasize the text-book, rather than the instructor's acquaintance with the subject through personal research; and the school atmosphere lacks the freer and broadening influences of the college. Another method of increasing the number of colleges has not been tried in this country, but may be coming,—namely, to divide a large university into a number of coördinate colleges, following the English plan. We have a precedent here in the establishment of coördinate women's college within a university, and what might be called a beginning of the scheme in the organization of freshman dormitories, providing separate community life for a single class.

2. A second possible solution might be found in a more even distribution of students between the colleges. In S. A. T. C. days the military authorities claimed the right to send students to any college that best suited the plans of the Government. In peace times there is no one in a position to carry out this solution of our problem. Should a Department of Education be inaugurated, as is proposed, the Secretary of Education might assume this determining function, if the emergency justified it, but he would have no easy or grateful task. One good result of such a plan would be that the colleges would tend to emphasize more their distinctive qualities, and avoid the present tendency to vie with each other in the number of courses they offer in precisely similar departments. Union College offers an example of such specialization, having been led by its proximity to the General Electric Laboratory to limit its range of courses to particular fields of science.

3. Assuming, however, that more colleges are undesirable and better distribution impracticable, unless the colleges are content to continue the present seemingly hopeless struggle to make both ends meet by desperate efforts to increase endowments, the only practical solution for the independent college, jealous of its reputation for thorough work, seems to lie in the direction of limitation of num-

bers. There are those who object to this as wrong in principle. They claim that it tends to introduce a caste system, alien to democracy; that every earnest youth is entitled to all the education of which he is mentally capable; that, while the high-grade college student, on the whole, has a better chance to succeed in life than the mediocre one, there are so many exceptions to the rule that every one should have a fair chance. In reply it may be said, first, that many of our students give such evidence of lack of brains and of application that they must be considered to be wasting their own time and that of their teachers, and that they and their kind should be excluded from college, if possible, or dropped as soon as their mental and moral characteristics are clearly seen, and secondly, that, if the colleges are crowded beyond their capacity for best work, it is better for the country that a smaller number of men and women be well educated than that a larger number receive a smattering of a college education when they would be more profitably employed in some form of productive industry.

There are serious difficulties in enforcing a limit of numbers, as some of us have already learned. If an arbitrary number is to be fixed for a small college, what shall it be? There seems to be fairly general consent that 500 is about the figure. One college president, with personal knowledge of a good many institutions, gives it as his experience that the average grade of scholarship is lowered after a college exceeds 500 under-graduates. Be that as it may, it is certain that a college body of 500 gives ample material for good athletic teams and other under-graduate organizations, it is about as large a number of students as can have general acquaintance with each other and a personal touch with all the faculty, and it is fair to raise the question whether an institution of over 800 or 900 students does not risk losing the advantages of a college while not achieving the quite different qualities of a university. It is a debatable point, and if decision is reached to limit numbers, the details will necessarily depend in each case on local considerations.

If limitation is determined upon, it may be accomplished either by restricting the number admitted, or by dropping a larger number from college, or by a combination of both methods. Limitation of the number admitted is more immediately effective, but is open to more objections than is an increase in standards for promotion and graduation. For to adopt a much higher standard for entrance would increase the age on admission, already much higher than in European countries; it would tend to increase the chasm between colleges and the schools which we are trying to bridge; and it would be unfortunate in the case of some students of natural ability who by force of circumstances have been compelled to get their preparation at weak schools. Unfortunately in many cases a pupil is not at liberty to choose his preparatory school; the bright son of a clergyman, for instance, who is living on a small salary in a little community, is often necessarily trained in a weak school and feels the lack of suitable preliminary training all his life. Again, the adoption of stricter standards of admission is generally followed by a protest from under-graduates and alumni that the college is putting up bars to keep out promising athletic material, and that a kind of Rhodes Scholarship plan ought to be adopted which would ensure the admission of all-round men. This seems a reasonable claim, but can be met by the answer that no method has yet been devised for applying to school boys the tests that determine the choice of Rhodes scholars, and because of their immaturity it would be difficult to apply such tests to them; and secondly by the argument that it is useless to admit brilliant athletes and all-round men to college unless they have sufficient scholarship to meet college standards. They will fall by the wayside within a few months, in all probability, and no one seriously proposes that college standards be reduced to meet such cases.

The examination system is more easily adopted than the certificate system to the limitation of numbers on admission, for the passing grade can be raised or lowered as the emergency demands. Even under the certificate system, however, which almost all the colleges employ, there

are means of stiffening the requirements. A greater care in approving schools would help. The New England Certificate Board has shown by seventeen years of experience that a policy of renewing the certificate privilege absolutely on the basis of the work done in college by the product of the school in question will eventually place the certificate on a par with examinations for reliability. Reduction in the number of conditions allowed on admission would help to solve the problem. The allowance is generally about two units, though some colleges admit with three or even more units of condition, and even advertise the fact. If there is to be a higher standard of admission, it would be reasonable to give the preference to those pupils who have completed the full requirements over those who are short half a year or more in preparation, and whose very weakness in that respect shows that they are just the individuals who should not be expected or even allowed to do a lot of extra work in college. The comparatively recent practice in some colleges of refusing to accept certificates for those who stood in the lowest third of their class in high school, or even the lower half, as is the practice at Oberlin and elsewhere, has much to commend it, since those with the highest averages, even in a weak school, will be likely to have the mental qualities that promise success in college. The plan of Dartmouth College of accepting the highest quarter of the class of approved schools without examination and without condition, provided they have pursued certain fundamental studies, is interesting in this connection. Finally, a closer scrutiny of the units offered for admission would be helpful, and the refusal to accept a lot of scattered units with no coherent plan of study. In English, mathematics, and at least one other language from two to three consecutive years of study in school should be insisted upon. Most colleges are now requiring concentration in the last two years of their curriculum: If that principle is sound, it is doubtful pedagogy to admit a pupil who may present for admission, as the scheme of one institution allows, fifteen units from twelve different departments of study.

Some mention should be made here of the psychologi-

cal test for determining admission to college. At the last meeting of the College Entrance Examination Board it was reported that the students admitted to Columbia last year by Board examinations showed an average standing represented by .43, while those admitted by the psychological test were rated at .59, and later in the year reached an average mark of .65. Without going into details as to the method employed in computing these results, it may be safe to assume the superiority of the latter class over the former. But the expression "admission by psychological tests" must not be taken too liberally. No college, so far as is known, admits students solely on these tests. They are always used as merely supplementary, either for doubtful cases of students who are applicants for admission by examination or as a substitute for examination tests for students who present satisfactory school certificates. For the psychological test measures mental power, not intellectual achievement, and the former, while eminently desirable, is not after all the *sine qua non* of admission to college. Dr. Charles Mann has stated that only 10 per cent. of those who were graded A in the mental tests applied to the 3,000,000 men of the United States Army in the recent war were in college or intended to go to college. The remaining 90 per cent., while comprising the bulk of the best brains of the youth of the country, were not from that fact alone suitable material for a college education, since many of them lacked training in the fundamental subjects of study on which the college curriculum is necessarily based.

The second part of the report will deal with finances. If it is important, from the point of view of high standards of scholarship, that the colleges should not be required to try to educate more students than the size of their faculties and their physical equipment permit, it is equally important that they have sufficient means to provide the proper recitation halls, laboratories, libraries, etc., and to pay such salaries as are necessary to secure the right kind of teachers. The expenses of a college have increased rapidly in the last few years, but they have been advancing steadily for a quarter of a century. A report soon to appear from the

United States Bureau of Education shows that during the past twenty-six years (1892-1918) the average value per student of the endowment funds of all the colleges and universities in the country has increased from \$490 to \$1,282 (i. e. 162 per cent.—or two and one-half times as much per capita). This per capita increase in endowment has not kept pace with the increasing cost of giving students a college education, for the percentage of income derived from this source has decreased almost steadily within the last twenty-eight years. Again, the average “working income” per student, that is, the money available from income of endowments plus student fees, has increased from \$68 to \$665, about 437 per cent. In other words, it now costs over five times as much per year to provide education for a college student as it did twenty-six years ago. It is well known that a college receives from its students in tuition fees only a small part of the cost of education. In the state universities only a nominal amount is paid, the running expenses being met by state taxes; in the independent colleges generally less than half of the actual cost is received from fees, the balance coming from endowment funds or special subscriptions. In view of present burdens upon the college treasury, due to the high cost of living, and particularly the necessity of paying higher salaries, the proposition is sometimes advanced that tuition charges should be raised so as to cover the complete cost to the college, relief being given to the poorer students from the endowment funds. There is much to be said for this plan. It is urged that the endowment funds, contributed years ago when conditions were different from the present, were given to aid indigent students, at a time when most students were in need of such aid; but that now there is a relatively large number of sons of well-to-do or rich men in college who are quite able to pay their bills, and should do so, rather than spend their money on automobiles and other expensive amusements. It is further claimed that parents are ignorant of the facts in many cases, and that those of means would prefer to pay full charges rather than to accept a sort of charity; also that a college should

be run on business principles, and that it would be more respected, and higher education would be more esteemed, if it were put on a different basis in this regard. But the arguments on the other side are weightier. After all, a college is a charitable organization and as such is relieved of taxation; it is like a church, or a hospital, and its blessings are for all classes without regard to the size of their pocket books. Again, the alumni would lose their life-long sense of obligation to Alma Mater if they looked back, not to a generous outpouring of favors, but to a rigorous accounting in dollars and cents. Finally, the independent colleges would suffer in adopting such a policy from the fact that many students in moderate financial circumstances, disinclined to accept a remission of tuition in particular cases as savoring of charitable aid, would choose the comparatively free training of a state university or would be kept away altogether from a college course.

There has been considerable increase in tuition charges during the past two years, from 50 to 100 per cent. in a number of cases, and further increases seem to be necessary because of current conditions; but it is not likely that the tuition charge will be further doubled or trebled, as they would need to be if actual costs are to be met. Indeed, if and when pre-war financial conditions return, it may be that some reduction in present charges can be made. The solution seems to be rather in further efforts to increase endowments. Fortunately the American people have been well trained in giving, and the American colleges have never been in a better position to appeal for aid than now, when their services to the country in the war have been generously recognized and acclaimed, and when their economic and social contributions to the country's good are more thoroughly appreciated than ever.

As a practical suggestion on this point, it is worth while to call attention to the policy of one of the colleges in sending to parents, along with college bills, a circular stating the facts as to the actual annual cost to the college per student, and suggesting contributions from those able to meet the full charges. The results in the way of receipts

have been encouraging, and if some such plan were generally adopted it might result in contributions toward the support of college work from many who would otherwise give nothing.

Having pointed out the difficulties confronting the colleges from the surplus of students and the lack of funds, it remains to consider what methods are being used by the faculties to improve the grade of scholarship, and whether any new ones can be suggested. Among the plans followed which may be designated formal or mechanical are two groups that may be classified as negative and positive, or prohibitive and hortatory. On the one hand, rules have been adopted to debar the low-grade students from the so-called student activities that interfere seriously with study. Practically all the colleges limit membership in athletic teams to students of respectable standing in scholarship, a great change from twenty-five years ago when anyone registered as a student, even in a special course, could participate in athletics without investigation as to his class standing. Again, the rule debarring freshmen from varsity teams is slowly winning its way into general use, despite the hesitation of the small colleges, and a few large ones, to adopt it. Not only does it tend to prevent proselyting, for few are willing to spend a year on probation if they come to college only to play on the teams, but it saves many a student who could not have withstood the demands of athletics on his time and energy during the critical months from October to December of his freshman year. Experience has shown that better varsity teams are produced under this rule than without it, for coaches can now count on a certain number of players for three years, while formerly a large number of the freshmen prominent on the varsity team disappeared before the sophomore year. More than half of the colleges that answered the inquiries presented to certain members of this Association reported that they enforce the freshman rule, and one president states that it has cured ninety per cent. of their athletic troubles. A third rule of prohibition is in the direction of limiting the number of activities in which a student

may engage; this generally takes the form of the so-called "two-sport" rule, though some institutions have an elaborate point system in which each of the manifold sub-divisions of student organizations is weighed and a total of only so many points is permitted.

In contrast with these prohibitive measures are others which may be called hortatory. Various forms of reward are being offered to good scholars. The so-called "Dean's List" is used in some colleges,—students winning a place on the list by high marks are allowed an unlimited number of absences from recitations, and sometimes other privileges. It is unfortunate that, owing to the frailty of human nature, these privileges are sometimes abused, and the plan is not an unqualified success. Sometimes the high-grade student is required to complete less than the usual requirement of hours for graduation, as under the point system, where each grade of marking is weighed by points, decreasing as the grades descend; so that graduation means not merely passing in so many hours, but also securing a certain number of points. (A parallel system, which does not make such a substitution, but requires comparatively high grades of all, calls for a certain proportion of a student's grades to be C or better; in practice the requirement varies from 50 to 75 per cent.)

It is doubtful whether the offering of cash prizes has a very stimulating effect on scholarship in general. Competition is generally restricted to a few of the best scholars; where fraternity competition is keen, it happens sometimes that particular students are chosen by their fraternities to enter the competition for the glory of the chapter, and they are carefully groomed for the test. With such a motive, scholarship gains little.

There is also a question whether the offering of cups for competition in scholarship between fraternities is very helpful. In most cases the "barbs" or the new fraternities win, and the old line societies, comprising frequently the very men who most need stimulation, are content to vie with each other in avoiding the last place. Few fraternities, unfortunately, make a specialty of high scholarship.

While the bright student may not *ipso facto* be undesirable, it is the good fellow that is wanted,—the man with the social qualities that will cause him to fit in well with the rest of the group. In disgust at the poor showing of some of the fraternities in such a competition, one dean has threatened to put off the campus all the groups that do not reach a certain percentage of scholarship, and another has warned the lower groups that they may be debarred from all social activities unless they improve their rating. College administrative officers get much help from fraternities in matters of discipline, but not so much as they might in improving scholarship. Conditions would improve if fraternities were not permitted to initiate untried students a few weeks after the beginning of the year, but were required to postpone initiation until after mid-years, and then were allowed to take in only those bearing the mark of faculty approval in scholarship.

The adviser system is still on trial; it works well in some colleges, but poorly in others. Of the colleges reporting to this Commission one-third praise it, another third are luke-warm, and the rest condemn it as a failure. Youth is impatient of advice and seems particularly averse to taking advice from a particular individual who is appointed by a higher power to give it to him. It must be admitted that not all advisers are suited to the task; the function tends to become mechanical, and is slighted by those who take responsibility lightly. One college pays each of the advisers \$200 a year extra for the work, which ought to deepen the sense of responsibility; but generally the work is done by well-meaning volunteers. Sometimes there is a class adviser, or the major instructor acts as adviser to his particular students, or each instructor is considered adviser of all in his class. Most promising is the use of the psychological expert or vocational adviser who gives all his time to the study of individual students, and attempts to fit them into vocations for which they are naturally suited. It is essential for the success of any system that the instructors concerned should have frequent meetings for consultation; by comparing notes regarding individual students, their

work would be made more effective. It is a question whether it is worth while to appoint advisers for freshmen who stand in the first half of the class in scholarship. If efforts were concentrated on the low-grade men only, more might be achieved. Again, it might be worth while to let the students choose their own advisers; the element of compulsion would be more disguised, and the experiment would at least begin with the advantage of personal touch, if not of intimacy. A system of undergraduate advisers would avoid some of the difficulties of a faculty system; in the places where it has been attempted it has worked fairly well, but it needs constant supervision and encouragement by the faculty.

Membership in the Phi Beta Kappa Society ought to serve as a stimulus to scholarship. It is an honor that is highly prized and the prospect of a key has raised many a student to the grade above that with which he would otherwise have been content. Unfortunately, election does not take place until the end of the course, and there are few active members of the chapter in residence during a school year. Hence a meeting of the society is rare, except at Commencement, and its direct influence upon the undergraduates is likely to be negligible, as most of them have gone home before Commencement Day. The practice that prevails in some colleges of electing half of the initiates early in senior year, helps to keep the Society and its aims before the student mind; meetings of the active chapter should be encouraged, and public meetings, banquets, etc., have proved a valuable stimulus. There is nothing in the rules of the United Chapters that prevents public initiations. It has been found worth while by some colleges to elect all members soon after mid-years of senior year, and to have a public initiation, with addresses on the historic significance of the Society and its honorable place in college life. If a larger proportion of the senior class wore their keys about the campus for several months, the object lesson would be greater than it is now when these honorable symbols are rarely seen except as worn by alumni.

Various methods have been employed to focus the

attention of college students and the general public upon high honor men. The publication in the general catalogue after the names of graduates of the honors and notable prizes taken during the course was suggested a few years ago and is being carried out in some institutions. Quite frequently a list of the honor students in each class is posted on the bulletin board or printed in the annual catalogue. It has been suggested that an honor tablet be set up in the library, the names of the Phi Beta Kappa men of the senior class, or of all honor men in college, to be displayed, and the lists changed from year to year. The names of the honor students of the graduating class are practically always printed on the Commencement program, and are sometimes publicly announced from the stage. Sometimes an Honor Day or a Recognition Day is observed during the college year, those whom it is desired to honor being seated on the platform, when prizes, Phi Beta Kappa keys, or other tokens of scholastic success are distributed, and addresses are delivered in praise of high scholarship. Opinions differ as to the desirability of some of these methods. They are intended to offset the undue prominence given to successful athletes, and while they may sometimes achieve success, or partial success, the subject, or the victim, of these attentions may deprecate such publicity,—for, after all, the true scholar is, or should be, a modest man. He finds his satisfactions elsewhere than in the applause of the multitude.

Having touched on some of the formal, perhaps mechanical, means of improving the grade of scholarship, let us in conclusion consider the question from a broader aspect. There are at least three ways by which the faculty could aid in this matter. First, they could appeal to the motive of a college education, rather than emphasize merely high marks. The Grade-A-man is born, not made. Not all students, to be sure, who are born with A brains are so ranked in class lists, for many, unfortunately, do not use their natural ability. On the other hand, a D or an E brain, while it may by hard work win a place in the C group, seldom rises to the B class and never to the highest class.

So that what we should encourage is effort to improve upon nature's classification—to make the very best of one's opportunity, and with the motive of preparation for successful life. No stimulus to scholarship is needed in the law school or the medical school. Self-interest is sufficient inducement to the man who notes that professional success will depend directly on the equipment he brings from his preliminary training. So the college boy should be shown, by a study of the lives of graduates and by forceful addresses from prominent alumni, that success in college is the basis of success in life,—that neglect of opportunity in college means a handicap to all his future career.

Secondly, faculties might aid the cause of scholarship by making a greater discrimination than they do between those who are anxious to learn, and those who are wasting time and money in college with no other motive than to secure a degree. Eighty per cent. of the students in English universities are honor men, and the efforts of professors and tutors are centered rather upon them than on the small fraction of pass men. It may be urged that in a democracy all should have an even chance, but surely this is a case of the "greatest good for the greatest number." The Harvard experiment of general final examinations seems to be working successfully in this direction. Here the requirement for graduation is not merely the passing of so many courses or in so many hours of work, but the knowledge of a major subject such as comes not only from passing certain individual courses but also from general reading, filling in the gaps between the courses taken, and all under the guidance of tutors. By this method a mastery of one department of study is assured and the true foundation of scholarship is laid; for the real scholar is one who, with a sound basis of general information, is a master of at least one department of human study.

Finally, it should be recognized that inspiration to scholarship comes from the teacher, not from the textbook, library, or laboratory. The primary and the lofty function of a teacher is to teach, not to serve on committees or to play policeman or act as judge in disciplinary matters.

No college professor can do his best work as an inspirer of youth unless he is made free of financial worry by receipt of a salary sufficient for the present and future support of his family, and is exempt from bothersome routine which consumes time and diverts from more important things. Administrative and clerical functions in a college are important and must be provided for, but they need not fall upon the shoulders of good teachers to the detriment of their chief professional work. For example, the editing of the college catalogue and the other official publications of the college could be done just as well by a clerk with some journalistic training as by a professor, perhaps better. The college professor should have stenographic assistance at his command, for correspondence, the preparation of a syllabus, and other matter pertaining to his department. It is poor business efficiency to take the time of a \$4,000 man to do the work that can be done equally well by a \$1,000 clerk. Professors are jealous of their rights in a share of the management of the college, but they want, and should have, a voice chiefly in the educational policy of the college, and would often be only too glad to be relieved of responsibility for details that belong to the officers, generally not teachers, who are appointed to administrative offices because of peculiar fitness for such tasks.

The suggestions just offered may be criticized as being too vague. Let us consider a concrete scheme. It has been said that the Phi Beta Kappa Society plays a comparatively small part in college life because the active members are elected only at the end of the college course, and their presence as a recognized group is almost negligible. In other words, the best undergraduate minds are never brought together during college days as a working unit. College students like their elders are fond of clubs. Suppose we faculty took the lead in organizing a club of the grade A students of all classes, the freshmen being elected at or near the end of the freshman year. You would then have a group of about one-fourth of the student body or less, the most natural aristocracy of the undergraduates, the men who are later to be leaders in scientific research and in the

professions, the graduates of whom the college is going to be most proud. Suppose the college provided a good club room for such a group, furnished so as to be an attractive meeting place. Might not such a club be an organization of great influence on the college body? Picked men of that grade of intellect would surely find a pleasure in the matching of minds; and a member of the faculty, or a distinguished visitor, would welcome the chance of addressing a group of men whose native ability was on the average as good as his own. He would be free from the feeling, so embarrassing in the ordinary lecture room, that he was addressing men of all grades of intellect and that he must accommodate his remarks to the middle, if not the lowest, grade. If groups like this were organized in a number of colleges, intercollegiate conferences might be arranged with neighboring institutions, resulting in intellectual as well as social gain. The organization might bear a suggestive name, such as the A Club, or the Alpha Club; its members could wear a pin or some distinctive emblem; they might even rise to the importance of a sweater with a letter as large as the Varsity's, if public opinion supported them. The club idea could be emphasized by "posting" the names, not of those financially delinquent, as is the practice in ordinary clubs, but of those who with no satisfactory excuse were making poorer grades than they should, and a persistent offender could be dropped. It would be interesting to try an experiment of this sort and see whether or not an exclusive club with stiff requirements for admission, made up of all four college classes and all fraternities, would not compete in influence with the associations of athletes that are now looked upon with such reverence by the college undergraduate. With the proper backing of the faculty and prominent alumni, distinguished for scholarly and professional success, such a plan might prove an important stimulus to high scholastic standards.

II. FRANK AYDELOTTE, Chairman, Committee "G," of the Association of University Professors, and American Secretary of the Rhodes Scholarship Trust.

I am sure the Association feels that it is to be congratulated on having organized a committee which could present so comprehensive a report on so important a subject as that which has just been read by Dean Nicolson.

I, for my own part, can think of hardly any phase of the subject which was not handled in that report and well handled by it. I only wish that Committee "G" of the Association of University Professors, of which I am Chairman, and which has the duty of dealing with the same problem, could be certain to produce a report so exhaustive and so well done.

In discussing Dean Nicolson's report, I am going to give you some of the results that have been reached by our Committee. When I speak of results, I wish to be distinctly understood that these are only the results of preliminary discussion. They have not been passed by the Committee. I am not authorized to speak in the name of the Committee, because the Committee has not yet made its report; it has merely proposed at Chicago certain questions for discussion. It has not as yet committed itself to opinions. I have myself certain very strong opinions on the subject under discussion, and I shall express them frankly, but I should like the body of men here present to understand that I am expressing only my own opinions, and that our Committee may see fit eventually to reverse them.

There are two aspects of Dean Nicolson's report which are quite distinct and different from one another. The first deals with the machinery by which our undergraduates are to be induced to do well the tasks which we are at present assigning to them. That includes the question of providing competent instructors, of restricting the sections to the proper size, of inducing the students not to waste too much time in athletics, but to study their lessons. All that looks toward giving to a large number of students the same kind of training that we are at present giving to

tion, but my own opinion is that it is not right to hold back the "A" men for the sake of making a section interesting. The section is not an end in itself. We look on our teaching too much as a kind of performance where the end is gained if we have conducted an interesting recitation, have raised important questions and have brought about a discussion which stimulates the average man by the example of the best. But we must not sacrifice the best men to educate the dull ones. The truth is that these best men, if put off to themselves and given a severer training, could do much more than they do at present in our colleges and universities. It is in this direction, seeking means to accomplish this result that our Committee is working at the present time, and, in my own notion, that is the right direction.

Dean Nicolson suggested the organization of an "Alpha Club." In my opinion we ought to make the Alpha Club not a Club but a part of our educational machinery. We should separate the Alpha men not to meet in a club room but to meet in lectures, recitations, and libraries, and to carry on together the principal business of the university, which is education. We should then give to the average student the kind of course he can profit by, perhaps slightly less ambitious than we give to the whole group at present, and we should make our Alpha men and women do more reading and more thinking, and give them their degrees with Honors as a reward. The value of the Honors degree, if given on this system, would be quickly understood, and the men and women who had taken it would be chosen for those positions that demand intellect, ability, and attainments of a high order.

We should require these best students to do something more than master separate courses. They should be required to read between their courses and around their courses in such a way as to get a comprehensive knowledge of the subject in which they are specializing. This comprehensive grasp of the subject should be tested at the end of their course by an Honors examination, preferably conducted by outside examiners, who would more or less

ignore the division of the subject into courses and rather test the students on their knowledge as a whole.

There is another subject which I have promised to discuss with you tonight and that is the record of the Rhodes Scholars whom you have sent to Oxford during the last fifteen years. I say "you," because a great many men in this room have served on Committees of Selection from the time the Rhodes Scholarships were started until they were interrupted by the Great War.

When the elections were resumed after the war the Rhodes Trustees decided to put the responsibility for selecting Rhodes Scholars on the three hundred ex-Scholars now living in the United States. Many of these men have now reached the age and position where they are quite capable of assuming this responsibility, and our new Committees of Selection are now composed almost exclusively of ex-Rhodes Scholars.

These ex-Rhodes Scholars are very eager to improve the quality of men sent to Oxford. While we have sent over in the past a great many men of fine quality, we have sent over some who were not. Every one who goes to Oxford is taken as representing the United States. If a poor man is sent, the other Americans who are over there feel keenly the discredit which it throws on our country and on our educational institutions.

I am frank to say that I think the ex-Rhodes Scholars in their efforts to improve the quality of the men sent over have created a false impression in this country. Their utterances on the subject have been taken to imply that the entire group of Rhodes Scholars in the past, or at least a very large portion of the group, were unsatisfactory men. I wish to say very emphatically that that impression is not correct. The Rhodes Scholars have always been very unequal. The best of them have been as good as we shall ever get. The average quality has been rather better than the average of all the English Honors men at Oxford, and if it were only possible to eliminate the comparatively small group of the poorest men, that average would be very creditable indeed.

As a means of placing clearly before the educational men of the country the facts about the best, and the standard which we wish to attain in the future, we are now preparing to publish a statistical study of the record of the Rhodes Scholars from the beginning down to the present time. We have a statistician in our group, Professor R. W. Burgess of Brown University, who did some creditable statistical work in the War Department during the war. At my suggestion Professor Burgess has made this study of the record of the Rhodes Scholars, dividing it into three parts: (1) their preparation before going to Oxford, (2) their record at Oxford, and (3) their careers in the United States since their return, analyzing these records by states and colleges, and condensing it into all those charts and tables which are so dear to the heart of the statistician and so terrifying to the average reader.

This study in full will appear in the January number of our Rhodes Scholar magazine, the American Oxonian, which is published by W. W. Thayer, of Concord, New Hampshire. I want to give you this evening merely a brief synopsis of the results.

Something over 500 Rhodes Scholars have been appointed from the beginning down to the present, of whom 360 are now living in the United States (38 not yet having gone into residence), 130 are at Oxford, and 19 are living in other countries. The Rhodes Scholars represent 172 American colleges and universities; 39 institutions have sent as many as five or more, while 7 have been represented by ten or more Rhodes Scholars. Of this last group Harvard and Princeton lead with eighteen each, Yale has thirteen, Brown eleven, the Universities of Idaho and Virginia ten each. The average age of the Rhodes Scholars at the time they enter Oxford is 22 years and four months; the youngest are 19, the oldest nearly 25. Most of them have taken at least the A. B. degree in an American university; only 14% have had less than a full college course, while 19% have had one or more years of graduate or professional study. Eighty per cent of those going from institutions where there is a chapter of Phi Beta Kappa are mem-

bers of that society. Forty per cent have represented their colleges in one or more branches of college athletics.

At Oxford one-third of the Rhodes Scholars studied law; one-sixth Modern History or Economics; another sixth Humanities, including Classics and English Literature; while the remainder studied a wide range of professional and cultural subjects. About four-fifths of the men take the Oxford B. A. degree in one of the Final Honor Schools, while one-fifth take research degrees. A comparison of the record of the men who take the Honor Schools with the entire body of English Honors men taking the same examinations shows that the Americans take more Firsts than the English Honors men, and in Firsts and Seconds together their lead is still greater. The standing of the Americans in these examinations is not, however, so high as that of the English Scholarship men who are trained from their public school days in the type of work represented by Oxford examinations. In Firsts and Seconds together the standing of Americans in comparison with these English Scholarship men is better. The percentages are as follows:

	All Honor Men	Rhodes Scholars	English Scholarship Men Alone
Firsts	13 %	15 %	33 %
Seconds	37 %	49 %	45 %
Firsts and Seconds combined	50 %	64 %	77 %

Americans succeed best at Oxford in those subjects of study which are not based on previous preparation while the record of English students is exactly the other way. American Rhodes Scholars have secured a total of twenty-three university and college prizes of high rank. Men who were members of Phi Beta Kappa have a slightly higher record than those men who were not, and the Rhodes Scholars who were unusually young or unusually old at the time they went to Oxford have a higher record than the men of average age. Rhodes Scholars from the larger states make a better record at Oxford than those from smaller

states. The men from the Middle Atlantic States have the best all round record, those from the South Central States the second best, while those from the West North Central States have the poorest record.

Of the American Rhodes Scholars who had a year or more at Oxford before the war, 70 per cent. represented their colleges on one of the various athletic teams, and 14 per cent. of the men represented Oxford against Cambridge in athletics.

On their return from Oxford the Rhodes Scholars do not go back to the states from which they were appointed. At the present time there are three states in which only one Rhodes Scholar is living, seven in which there are only two, and nine in which there are only three. On the other hand, there are 42 living in the State of New York, 23 in Massachusetts, 17 in Illinois, 13 in California, 10 each in Maryland, New Jersey, Pennsylvania and Texas.

More than one-third of the Rhodes Scholars have gone into university or college teaching, about one-fourth are practicing law, over ten per cent are in business, while the others engage in government service, social and religious work, medicine, scientific, literary and editorial occupations.

The men engaged in teaching have an average age of 33 years. About one-third of them are full professors and another third assistant or associate professors, distributed through 75 universities and colleges. Of those practicing law, two-thirds do not take further legal training, but find their Oxford preparation sufficient. Of the 140 Rhodes Scholars who were 34 or over in October, 1920, 10 per cent. are included in the last edition of *Who's Who in America*.

In commenting upon his Study from the point of view of the ideals of the Founder, Professor Burgess says:

"In regard to the probable future influence of the Rhodes Scholars in American life, the critic may point out the absence of politics and diplomacy from the list of occupations, and the small number in public service of any type. The expectation of Rhodes, or at least of some of the early writers on the subject, was that the Rhodes Scholars would enter politics in the English sense, or go

into the diplomatic service. But neither of these lines affords a career in the United States for a man with his own way to make; the organization of the diplomatic service rather than the Scholars or the Scholarship plan, is to blame for this imperfect fulfillment of early expectations.

"But even while it is admitted that in politics and diplomacy the original intent of the plan has not been realized, and is not likely to be realized, one should realize fully the significance of the large proportion—over one-third—of the men engaged in education, especially college teaching. There is a closer relationship in the United States than in any other country between education and public life; we are therefore justified in saying that the Rhodes Scholars in that occupation are in a position to exert as great an influence as they could in any other line—even in politics—and more than in the American diplomatic service."

This record of the American Rhodes Scholars is creditable, but we are not publishing it merely because we are proud of it. It is our intention first, to do justice to the men who have held Rhodes Scholarships in the past, and, second, to provide ourselves with a measuring stick by which to estimate the improvement which, with your co-operation, we hope to make in the quality of the Rhodes Scholars of the future.

ADDRESS

John H. Finley, *New York Times*.*

I shall take only a moment, and what I say must be rather personal.

I came here because I wanted to keep my word with your president; I was, I think, providentially detained last night. I am here tonight in the face of Providence, because I wanted to see once more the members of what I consider the noblest guild in America.

I had the distinction once (it was the only supreme distinction of my life), of being the youngest college president in the world. But time took that one distinction away from me, and has given me another. I am now, with the exception of President Warfield, I think, and President Thompson and possibly one other, if you consider me a real university president, I am the oldest university president in the United States in point of service, which will indicate to you how young the other college presidents and university presidents are.

I can say of time that time has taken away and time has given. Blessed be the father of time, for no one can have had a happier experience as a college man than I have had.

Before Butler and Hadley and Hibben and Brown, where was I? I have seen college and university presidents come; I have seen college and university presidents go; I have seen some both come and go, and here I stand, as I said out in Ohio the other day, I stand as Priam on the walls of Troy, wise, I can say wise with age and garrulous with years, with some of my older captains about me, looking down as Priam upon the plains of Troy, and talking to the new, the younger, chieftains that are carrying everywhere this great conflict in the field of education.

*Commissioner of Education of the State of New York and President of the University of the State of New York, 1913-1921; with *New York Times*, 1921. Dr. Finley was unable to edit the stenographic report of his address because of his departure for Europe.

I am not like Priam, however, except that I have been long in the service, and that I still can speak of the beauty of learning. It has justified all this struggle of what I might call for myself the thirty years' war, for I have been thirty years in this service. But I do not speak to you as the 'periphrastic mute,' as I think it was called; I am not using the language of the gladiator and saying 'I am about to die and salute you.' Therefore I do not propose to die yet for a while, God be willing. I hope to go on fighting for the very things for which we have been fighting thru these many years, some of us together.

I hope to be looking to the same objects which are your objects, and fighting with you, perhaps in a larger field, for I can now take an interest in things outside of the State of New York, dear as the things are here. They are never and will never be less dear, and the interest outside will be great. I feel as if I had simply been detached from the defensive part for a moment, or for a little time, and sent in the front of the trenches to bring information back as to what we should do in our next offensive. I do not know how helpful I can be, but that is my desire, at any rate.

I proposed last night to say something about education. I am not going to do it tonight. I am going to simply say good-bye to you, because this I think positively is my last appearance. I have prolonged my official life a little bit in Albany that I might still be one of your number while here. I am not to leave the Guild until the end of next week, at the end of the business day, and I shall move the clock back so that that business day will not end until one day more.

I will stay as long as I can with those who are to me the greatest in all the world. I have had it in my desire for many years, and have expressed the desire that before I went away from this earth I might walk around it—at any rate around the parts on which one can walk.

I was speaking of that the other day to a man whom I met on the train, on the last lap of his journey back from Japan; and he told me of meeting in California a French

priest, and he asked him how he happened to be there. He said, "I had a dream one night, back in my little parish in France; I dreamed I came to the end of my life, and I was summoned into the presence of the Almighty, and the first question he asked me was 'What do you think of my earth?'" and he said, "I was very much embarrassed when I had to tell him that I had never seen his earth, that I had never been outside of my little parish."

Well, I hope in the next ten years I shall see something of this earth, and that I shall be able to make a report when I am asked, if my opinion is desired. I hope I shall be asked, and I am sure I shall have reason for an optimistic report. When I graduated from high school I remember that the subject of my graduating oration was "The mists, or clouds—I have forgotten which—are rolling away," and I traced the history of man from the beginning, and showed how he had progressed at all times and in all places; and my conservative New England principal called my attention to the fact that at some times and at some places perhaps there had not been progress. So I took my oration and revised it in this way: "There are some people who contend that the world has not always progressed at all times and in all places, that it has in fact retrograded at times; but," I said, "the world moves on nevertheless."

So after my thirty years in this service, I think I face the world with as great optimism as I had as a school-boy entering college, and I shall be able to say to the Lord, I am sure, at the end of these next ten years, not only that the best people on earth are the men whom I have known in the colleges and universities of America, but that in spite of all the things that have happened to discourage us in various parts of the world, the world moves on nevertheless.

**REPORT OF THE COMMISSION OF THE COUNCIL
OF CHURCH BOARDS OF EDUCATION ON
ACADEMIC FREEDOM AND TENURE OF
OFFICE**

Roy C. Flickinger, Dean, College of Liberal Arts, Northwestern University, Representing the American Association of University Professors.

As a member of the American Association of University Professors, I have read, for a number of years, its printed statements on this subject of academic freedom, and the chairman of the committee is a member of the Northwestern faculty; accordingly I am well acquainted with the work which he and his committee have been doing. I had expected, when I was invited to come here, to have something from the Commission to discuss, and perhaps to criticize; in lieu of that I shall content myself with a statement of what the Association has been doing and its present point of view.

During one two-year period, this Committee had over thirty cases brought to its attention; that is, complaints were lodged in thirty cases with the committee. It was not possible for the committee to deal with every case. They had neither the time nor the strength nor the money, and in some cases they thought the complaints were undeserving. They were interested in finding typical cases to investigate so that, when clearing up a situation, they would automatically clear up several other cases, as well.

You will be interested to know that of these thirty cases reported to the committee in one biennial, less than one-third involved academic freedom. I think it is the general impression that academic freedom is the burning issue here. Apparently it is not. Over two-thirds involved matters of tenure of office, and the committee has been so much impressed with this situation that just recently it has voted, not unanimously, but nevertheless voted, that hereafter the emphasis of the committee's work should be shifted from questions of academic freedom to questions of tenure of position.

public hearing of the charges before a committee of his fellow-workers in the faculty or, in case it is a matter involving his command of his subject and the faculty is not large enough to contain sufficient men who are conversant with the subject, to have a committee of men who are conversant with that subject drawn from neighboring institutions. In the case of men lower in rank than associate professors, who have been on definite appointment for a certain period of years and whose time has now expired, the committee does not feel that these men are entitled to a statement of the reasons why they are being dismissed, except of course that in these cases, like all others, the action taken would have come before the Budget Committee and due notice given of its action.

I may say, too, that the committee states that, where an institution imposes upon its faculties doctrinal standards of a sectarian or partisan character, so that opinions contrary to these would automatically be considered by that institution just ground for dismissal—that wherever that is the situation, a definite, written statement to that effect should be given to faculty men before they are appointed so that they may know unequivocally what restraints of opinion they are supposed to exercise during tenure of office in this particular institution.

So far I have tried to present, for the most part, the history and present opinions and actions of the committee. I wish to close with a few words of my own on the subject of academic freedom. It is different from the question of academic tenure. The thing which chiefly differentiates universities and the higher type of colleges from institutions of lower rank in the educational system is the fact that their members seek to discover new truth, whereas the others are contented to inculcate accepted truth. It is therefore not only a privilege but also a duty of university professors to examine the foundations upon which accepted truth rests. This process is constantly being carried on in every department of learning, but usually escapes the attention of the general public except in certain fields. A professor ought to enjoy a greater freedom in chal-

lenging accepted truth in the classroom than outside. This difference is due to the fact that in the one case he is addressing those who have been trained to weigh evidence, who will hear every side of the problem discussed, and who are required to listen to all of it; but in the other case an isolated expression or a single phase of the subject is likely to be seized upon and regarded as embracing the whole truth of the matter. Professors have the same right to conduct propaganda as have other citizens, no more and no less. As citizens they are entitled to affect in every legal fashion the evolution which is unremittingly proceeding in state, church, and society; but they ought to be careful to dissociate their universities, so far as possible, from their private activities in propaganda. I think that we ought to be particularly careful about mentioning our academic position in communications sent to newspapers. It is very easy and tempting to put down a statement that one is a professor in such and such a school when writing a letter for the public, particularly if the letter is on a subject connected with one's own department of special learning. But when a professor of geology writes a letter on the tariff or Socialism or Bolshevism, he ought to think twice before adding "Professor in ——— College" to his signature, thus leaving those who do not know under the impression that he is speaking as a specialist on these matters, when he is not.

Universities believe in evolution but not in revolution, in following wherever the truth may lead, not in grasping the latest hypothesis before it can be substantiated. This principle lies at the bottom of the statement sometimes made that a man is entitled to academic freedom in scientific matters expressed in scientific terms. That is of the essence of scientific method—to wait until one's theories receive a substantial foundation of substantiation, before announcing them as if they were fully established; but the principle is frequently violated in public letters and in other ways.

President Lowell differentiated four spheres in which academic freedom might be used or abused. You will re-

member that he said that it was a matter of academic freedom in the classroom and outside of the classroom, in one's specialty and outside of one's specialty; and I think most of the real difficulties arise in the cases of men outside of the classroom and also outside of their subjects. In other words, there is a small group who do not practice or possess the wisdom of Socrates. One of his zealous friends asked the Oracle at Delphi who was the wisest of men, and Apollo's oracle replied that Socrates was the wisest of all men. The Athenian philosopher was too modest to believe that this sentence was true in its surface meaning, and put himself to the test of finding out in what sense it was correct. As the pronouncement of the oracle, it must be true in some sense. So he went to the dramatic poets and questioned them concerning the principles of their art and found that they surpassed him in knowledge of that subject. Then he questioned them on subjects outside of their art and they answered with just as great readiness as in their own field. But he was learned enough to see that they made many mistakes when they went outside of their specialty. Then he went to the statesmen and they were able to tell him things about the management of the state which he did not know, and which he believed were substantially correct; but when he led them outside of their own department, again they would answer just as readily, but without the facts to back them up. So in every group to which he went he found them knowing more than he knew, but also supposing that they knew a great deal more than they did know, supposing that they knew a great deal that they did not know. And by that process he decided that the oracle was right, and he was wisest of men in that he was aware of his own ignorance and the limits of his own knowledge. There is a small group of university professors who are specialists in their own field but do not know where and when to stop, particularly in getting out of their specialty either in the classroom or outside of the classroom. In the classroom the students are required to attend. It is not right then that they should be called upon to listen to men lecturing on topics which lie outside the authority of their

special training. The only justification for requiring attendance is that the students are listening to men who are specialists. They are not supposed to listen to Greek professors talking about politics in the classroom or to professors of botany talking about Socialism. Then, outside of the classroom, whatever precautions a man may take, he always bears with him in his public utterances, whether in the public press or elsewhere, the reputation of the institution and of his college, and it is not right that a man should endanger the good name of his institution or college except in a field where he is qualified by special studies to speak with authority.

**HIGHER EDUCATION AND TRAINING FOR
CITIZENSHIP**

George F. Zook, Specialist in Higher Education, U. S. Bureau of Education.

In the modern world universities and colleges are indispensable. Thru them we hope to maintain and develop our present enviable culture, economic resources and democratic citizenship. These virtues and material advantages may be realized in such degree and in such measure as American citizens invest their lives in educational preparation and the nation's resources in the support of education including higher education. Colleges and universities therefore exist to raise the standard of living, to elevate the level of American citizenship, and to increase the measure of popular culture. Every higher institution ought definitely to be contributing these three factors to the lives of their students, no matter what courses of study they may be pursuing.

Raising the standard of living thru higher education means the training of young men and women to become leaders in industry, agriculture, business and commerce, which have long ago passed out of the simple elementary stages into the complexity of modern economic life. It means the preparation of persons who thru the possession of expert knowledge are able to increase the production of goods and cause the most economic distribution of them. It means the training of men who can solve nature's problems and harness natural resources for the benefit of society.

Just as material production waits on ability and education, so, too, does democratic government. The people have undertaken to govern the country thru representatives, thru direct participation, and thru the force of public opinion. It ought to be more axiomatic than it is that the people cannot solve intelligently our political, economic and social problems unless they understand them. These problems yearly grow more complex and difficult of correct solution. Every man or woman who attends a higher in-

stitution is called on to prepare himself to be not only a better producer but a better citizen.

Based on a high standard of living and effective democratic government is culture. Men and women universally aspire to an appreciation of what is best in life. Universities and colleges have always existed primarily for the encouragement of all these things. Important and fundamental as is technical and citizenship education the promotion of culture should be the climax of any college education.

In this discussion, however, we are concerned with training for citizenship and the part which colleges and universities should have in it. The keen public realization of the need for training in citizenship was one of the legacies of the Great War. The situation had been appreciated before those fateful days, but the presence of hyphenated citizens in the United States was concrete evidence of the need of citizenship training which stirred the people into speedy though sometimes ill-advised action. We have witnessed, therefore, a series of more or less unrelated Americanization experiments, which have undoubtedly done considerable good, but which have borne some of the marks of emotional hysteria. We have now passed out of the war's zealous fervor into the duller but more important days of peace. We ought, therefore, to deal very carefully with a matter so significant for good or ill as the proper training of college students to undertake the duties of American citizenship.

In its broadest sense training in citizenship would of course include the whole field of education. It would mean training young people for the most effective individual and social use of their physical, mental and moral powers. A discussion of this subject in this limitless sense is undoubtedly in place upon some occasions, but inasmuch as this would include the whole range of social policy I prefer to strip the subject of some of its wider aspects and to confine myself to something more concrete. I do this in part because I am convinced that we have already suffered by the vagaries that naturally arise when we apply the term citizenship training to something so wide and consequently

so indefinite as the whole scheme of human education. I shall therefore eliminate from my discussion all further reference to physical education and even to ethical education, important as the latter is in the making of good citizens. The home and the church exist for that purpose, altho of course it is right and proper that schools and colleges, especially those controlled and supported by religious denominations, should give the matter great consideration. What we are here concerned with is that knowledge which leads to the correct solution of public questions; that training which assists people to vote intelligently; which enables them to form intelligent opinions on local, state, national and international problems, in order that this public opinion may be brought to bear on our elected representatives and on all those who are in any way concerned with public administration. The matters I refer to are our increasingly complex social, economic, political and international questions which vex the best minds but which by the establishment of a democracy we have boldly referred to the people for their solution. The common weal of the nation and the world is bound up in the correct solution of them. Material and cultural progress waits on the development of public intelligence on public questions.

Training for citizenship has in recent years been taking definite shape in the elementary and secondary schools. This movement has resulted in increased attention to community civics as well as to state and national civics. The courses **in history have been overhauled** repeatedly with the idea of emphasizing those portions which contain the living past. Careful selections have been made in the field of literature for social as well as cultural reasons. Definite citizenship programs consisting chiefly of history, civics, and problems of democracy have been evolved by various committees representing prominent national associations. On these **programs of study there is now substantial agreement** and progressive schools are everywhere hastening to adopt them. Citizenship training in the schools, both elementary and secondary, has therefore received much thought and attention, and I think it may fairly be said that it is now approaching a satisfactory solution.

In colleges and universities training for citizenship has by no means received so much conscious attention during recent years as in the secondary schools. By this I do not mean to say that it has been neglected because, although there has been no organized development of citizenship training, it is a fact that college men and women have had such training as to enable them to take an outstanding part in the solution of public problems. To them the country has owed much of the wisdom displayed in national affairs throughout our history. In this connection it seems clear therefore that the presence of such a large proportion of higher institutions devoted to four years of training in the liberal arts and sciences has been a great national blessing. The country needs every man and woman who can afford to spend four years in college before taking up his or her technical or professional work. What I wish to say therefore seems upon first thought to apply less to the colleges of liberal arts and sciences than to the others. Even here, however, I am convinced that something about training for citizenship may profitably be said.

For some years it has been fashionable to define the objectives in the various fields of education and in accordance therewith to shape the educational program to suit the end in view. So long as one deals with such concrete objectives as the training of a doctor, lawyer, dentist, engineer or agriculturist, the problem of curriculum making is simplified—in fact, as I hope to show later on it has been too much simplified by having only a single objective in view. In the college of liberal arts and sciences, on the other hand, there is no such single dominating objective. We speak with something like equal emphasis, of the development of cultural appreciation, the training of the mind, ethical growth, and now more recently citizenship training, as being the objects of a liberal college education. Moreover, these objectives naturally lend themselves less easily to definition and delimitation than is the case in the technical and professional world.

Nevertheless I am quite convinced that college curricula need constant revision with that object in mind. I say

constant revision because of changing local, state, national and world conditions. The things of culture are born slowly from generation to generation and are handed down to us for an eternal heritage. The world's problems, on the other hand, are forever outrunning our comprehension, and we need therefore constant readjustment of the citizenship program of study.

By accepting the limitations which I have placed on the discussion of citizenship training it at once becomes apparent that the departments of history, political science, economics and sociology are most concerned in any program of study for that purpose. Any observer of recent developments in American collegiate education is painfully aware of the increasing tendency to departmentalize and to develop an extensive system of subject matter courses without reference to such larger objectives as the development of culture and training for citizenship. This tendency sometimes becomes so prominent that it often appears that college professors forget that they should also be educators. In other words, it has become increasingly difficult to secure a well considered consensus of opinion among college teachers on such larger objectives as we have in mind in this discussion.

That there is imperative need of it is indicated by a study of the curricula of colleges of arts and sciences. In a study of the "Requirements for the Bachelor's Degree" recently published by the Bureau of Education, Dr. Walton C. John reveals the fact that in fifty of the best state-supported colleges and universities the following requirements in semester hours obtain for the A. B. degree: foreign language, 15.19; science, 11.48; social science, 10.55; English, 9.02; mathematics, 7.00; and philosophy and psychology, 7.00. In fifty of the best privately-supported higher institutions the requirements for the A. B. degree are as follows: foreign language, 20.66; social science, 12.14; science, 11.44; English, 9.65; philosophy and psychology, 7.56; mathematics, 6.94; Bible, 6 semester hours.

will be seen that in these institutions the social

sciences, including history, political science, economics and sociology, occupy respectively third and second places, being exceeded by foreign language and science in the first case and by foreign language in the second case. It should be remembered that this is the condition obtaining in one hundred of the best known and most progressive institutions in the country. An examination of the curricula of less known and smaller colleges of liberal arts reveals the fact that these citizenship subjects do not by any means occupy so prominent a place in the college curriculum. Early last summer the Bureau of Education made a fairly extensive investigation of the teaching of history and the social sciences in colleges and universities. The results of this investigation show that only 119 of the 158 colleges and universities which reported require one or more units in this field for entrance. The student is ordinarily allowed to offer the required unit or units from any field of history, but little or no attention is given to requirements in the other social sciences. In fact, students sometimes encounter considerable difficulty when they offer community civics, for example, for college entrance.

In college also the investigation reveals the fact that, especially in the smaller institutions, the social sciences occupy a relatively less prominent place than they do in the larger ones. Often a single professor occupies a whole settee, comprising the entire field of history, political science, economics and sociology. Needless to say some important fields are grossly neglected while others are entirely omitted. As a result, thousands of young men and women are annually turned out of our small colleges with fine cultural development but very inadequately trained to assume leadership in the solution of our local, state, national, and international problems.

This situation becomes all the more apparent when it is remembered that a very large proportion of the graduates of small colleges go into teaching in the secondary schools. There they are very often called on to teach one or all of the courses offered in the fairly extensive history and social science program. It is a well-known fact that only a few

states have laid down definite regulations concerning the preparation of teachers who undertake this work in the secondary schools. Consequently few colleges have established a definite program of subject matter preparation for those who are to be recommended for this field of teaching. Since we are now living in a day of objectives I believe that a sufficiently high proportion of the graduates of our colleges of arts and sciences will ultimately be called upon to teach one or all of the social sciences in the secondary schools as to make it highly desirable for each college to lay down a minimum program of subject matter preparation for prospective teachers in this field. We have, as I have already stated, arrived at a substantial agreement concerning what the citizenship curriculum in high schools should be. What we need now is for colleges and universities to train teachers to carry out that program. Failing this, we shall have little notion about the adequacy of our present high school program in citizenship training.

There are other fields for citizenship training in the colleges of arts and sciences to which I wish to draw your attention briefly. All of you are aware of the wonderful progress which has been made in pre-legal, pre-dental, and especially in pre-medical education. Through the influence of the several professional associations State authorities have been induced to establish higher and higher standards of pre-professional work which must be done in high schools and colleges. It is quite natural that the character of pre-legal work required by the several law schools should approximate very closely with the best collegiate programs of study for training in citizenship. The fact that lawyers get this training accounts in part for the preponderance of civic leadership which we get from the legal profession.

In the field of premedical education, on the other hand, the situation is quite different. There the greatest progress has been made so that it is now the exception to find States which do not require two years of pre-medical education before licensing a doctor, and all reputable medical schools have a similar requirement.

Moreover, the character of required work has been

rather definitely outlined by the Council on Medical Education, whose recommendations are carefully followed by the various medical schools. By the time a student has taken the *minimum* of studies from among the required subjects and the subjects strongly urged by the Council on Medical Education, he has but 5 hours left to devote to a third list of suggested electives which include the four citizenship subjects of history, political science, economics and sociology. As a matter of fact even this opportunity does not ordinarily exist because the premedical course as outlined at individual institutions seldom requires any social science and usually affords little if any opportunity to elect it. In the medical course itself it is needless to say that the entire attention of the student is absorbed in his medical education.

It might be worth while to pause briefly for comment on the ill effects of this situation. The cultural side of the medical student has been cared for to a considerable extent by the required courses in the natural sciences and by the inclusion of 6 hours of English, 6 to 12 hours of a modern foreign language, 3 to 6 hours of psychology, and 3 to 6 hours of advanced mathematics among the subjects required or strongly urged. The citizenship subjects on the other hand, are not to be found in these groups.

When one stops to consider that the lone requirement in the field of the citizenship subjects made of a doctor who has spent four years in high school, two years in a college of arts and sciences, and four in a medical school, is a single college entrance unit chosen from the whole field of history and civics, I believe it will at once become apparent that our medical practitioners may be eminently well prepared to treat the body physical, but poorly equipped to render first aid to the body politic. We cannot afford to allow men who otherwise are leaders in the community, whose opinions are respected because of their standing, to guide the people falsely on questions concerning the common good. It is as easy for a medical man to be unfamiliar with the intricate questions facing our democracy as for anyone else.

Let us now turn to some consideration of the situation in the engineering schools. Happily a report of a committee of the Society for the Promotion of Engineering Education made in 1918 summarizes the situation concerning citizenship training in engineering schools. In 42 courses of study leading to a civil engineering degree, 18 required no social sciences whatever, while 21 required general economics, 2 political science, 1 sociology, and 1 industrial history. In the same number of mechanical engineering courses of study, 13 had no requirements in citizenship subjects, 21 required general economics, 3 political science, 1 sociology, and 1 industrial history. In electrical engineering courses of study 14 had no requirements of citizenship subjects, 21 required general economics, 3 political science, 1 sociology, and 1 industrial history. Among the 23 electrical engineering schools which have requirements in citizenship subjects, 1 school requires 12 hours, 1 six hours, 3 six hours, 3 five hours, 1 four hours, 8 three hours, and 6 two hours. The amount of social science required in other engineering courses of study is similar to that in electrical engineering.

From this review it will be seen that the citizenship training subjects have made some headway in engineering schools, but it is by no means uniform or sufficient. Dr. C. R. Mann is correct when he observes in his study of Engineering Education that "languages, economics, and social sciences are generally treated as 'extras' in (engineering) curricula, and are as generally regarded as superfluous 'chores' by the students."

This situation is, I am convinced, largely the result of faulty teaching and poor organization of the citizenship subjects. In our large universities it quite often happens that young instructors without adequate appreciation of what they ought to attempt to do are thrust before sections in economics containing engineering students. It is no wonder that the discussion often seems to center around economic theories which the student with difficulty relates to life about him.

For this reason and because the faculties of engineering

schools have lately appreciated the close relation existing between engineering and business and in order to prepare engineering graduates to undertake managerial positions, there has been a growing tendency to substitute courses in business economics, business management and special engineering economics for the more liberal courses in social science. This is in effect a weakening of the citizenship subjects since the substitution is made more for the technical value than for the value in training engineers for more intelligent participation in our government.

Turning now briefly to the curriculum of the agricultural colleges, it may be recalled that in the Morrill act establishing the colleges of agriculture and mechanic arts it was stated that "the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts . . . in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

In accord with this spirit one finds that about one-tenth of the usual agricultural college curriculum is elective. An additional one-sixth is devoted to non-technical subjects. The social sciences, including education and psychology, occupy a little less than 5 per cent of the curriculum. Almost without exception the agricultural colleges require some work in the social science group. The total amount varies from 3 to 23 hours, with a median requirement of 8 hours. Here, as in engineering, there has been considerable tendency of late to substitute courses in practical economics for the more general ones. Accordingly, at present one finds in the agricultural curriculum such courses as rural economics, farm management and marketing.

One might elaborate the situation concerning the citizenship subjects by examining the curricula of other schools and colleges in our large universities. I trust that enough evidence has been adduced, however, to show that few higher institutions have consciously adopted a program of citizen-

ship training, and that the amount of such training which students may secure varies all the way from the minimum of little or none for medical students up to the extensive courses enjoyed by a large proportion of the graduates from colleges of liberal arts and sciences. Where so little opportunity for citizenship training exists as in the pre-medical courses of study and in about one-half of the engineering schools, it seems to me clear that courses in this field should be inserted in the curriculum. For as Dean Everts B. Greene said before the Association of American Colleges two years ago:

"Some of these young men are going to be engineers and some of them are going to be physicians and some of the young women are going to be teachers and some are going to do other things; but whatever their choice of profession, they all have in common this vocation of citizenship."

The faculties of our colleges and universities are therefore confronted with the question of making up a curriculum of citizenship training for students in arts and sciences and in the several professional and technical schools. The matter is not a simple one because of peculiar local conditions, lack of appreciation on the part of many faculty members of its importance, and departmental difficulties. One or all these difficulties often exist in such aggravated form as to result either in the elimination of all requirements in this field or in a one-sided program of study. We have not as yet succeeded in getting from local faculties or departments in the field of the social sciences a balanced program of study in citizenship studies, especially for professional and technical students.

Probably we cannot expect such a balanced program so long as we leave it wholly to local faculties. During the war the Committee on Education and Special Training of the War Department outlined courses in war issues and war aims which cut across departmental walls and attempted to establish something that approached a uniform course in citizenship. The experiment did not have a fair trial, but it had a very perceptible effect on a number of

our higher institutions which either continued similar courses after the war or established courses in civilization required of all students.

In times of peace we cannot expect so close an approach to uniformity in citizenship courses as was attempted with the S.A.T.C., but I believe the experience had its lessons which we have been very slow to learn. We need some relief from the unbalanced program of citizenship training or lack of such program, which, on account of the conditions I have mentioned, now obtains in a large proportion of our higher institutions. We cannot expect to secure this relief by leaving the matter wholly with the local institutions. I believe, therefore, that it is incumbent upon such national associations as the American Historical Association, the American Political Science Association, and the American Sociological Society, which have for many years devoted so much attention to the curriculum of citizenship training in the secondary schools, to give us likewise a minimum program or programs of study for the higher institutions. Perhaps this would not be easy to do for the usual graduates of colleges of arts and sciences. It ought, however, to be both possible and desirable to suggest such a program for college students who will teach the citizenship subjects in the high schools. The same thing can be done for medical, engineering, and agricultural students, the program being varied sufficiently to meet the particular group of state and national problems which such professional and technical students would encounter.

Naturally, doubt as to whether such a thing can be done immediately arises. I believe it can be done because it is *being* done in nearly every institution of higher learning. Colleges of arts and sciences have curricula for citizenship training though they do not usually go under that name. Systems of majors and minors provide some program of study for the social science teachers in the high schools. Engineering faculties lay down certain social sciences in their lists of required subjects. So, too, do the agricultural faculties. Only the doctors seem to have side-stepped citizenship subjects almost completely. What these

faculties do in almost every one of our higher institutions competent representatives from several of our national associations dealing with the social sciences ought to be able to do much better.

Action of this kind would have several important advantages. In the first place, it ought to result in a well balanced program of study for citizenship training. Any committee working on this problem would inevitably recognize that such a program should be drawn from the subject matter represented by a number of college departments. It would not be a program merely of economics, or of history or of political science such as is now too often the case.

In the next place it would be a program made up by those who are best able to judge as to what it should contain. We do not ordinarily trust a farmer to build a cantilever bridge nor a fisherman to fit steam pipes. So I believe that engineering, agricultural, medical, yes, even liberal arts faculties, should have the benefit of the expert advice of those who have spent their lives in the citizenship studies. A program of citizenship training suggested by them ought to clarify local difficulties and come with considerable weight of authority to those who must necessarily be concerned with this matter.

Finally the selection of subject matter for the citizenship training program from several fields of study would help to break down the too arbitrary barriers now jealously erected between departments. It would cause faculty members to keep in mind the larger objective as well as the subject matter of the course; it would create for us a group of teachers devoted primarily to the training of college students for leadership in civic affairs. When these things have been accomplished perhaps we may then look forward confidently to the day when to train a few graduate students in specialized fields of study will no longer be more honored than to train college students for the intelligent solution of our nation's manifold and complex social and economic problems.

In this discussion I have used the term citizenship training in a narrower sense than is sometimes done. The

program of study to which I have referred includes those things in the realm of public affairs with which college men and women should be thoroughly acquainted. We need, however, not only intelligent citizens but good citizens. To the knowledge of public affairs gained in the classroom should be added zeal to act. Such inspiration is born in part from knowledge itself but it must be powerfully supplemented by the church, the home, the world's good literature and every other influence that teaches men the ultimate goal in life.

PLANS OF THE PRESSER FOUNDATION FOR AIDING STUDENTS IN MUSIC IN AMERICAN COLLEGES

James Francis Cooke, Editor of *The Etude* and President of The Presser Foundation.

There are two distinguishing characteristics of the Presser Foundation which should be of interest to you. First, it was the pioneer of the large American Foundations devoted to Music; second, it is probably the foremost of all Foundations established by an *educator*. That a man who spent a large part of his earlier years as a teacher could be able to found a great philanthropy designed to benefit the Art that he taught and those who will teach the art in the future is, in itself, remarkable.

The Presser Foundation began with the establishment of a Home for Retired Music Teachers, opened in Philadelphia in 1906 and since then expanded by stages until it now occupies a fine modern building erected in Germantown, Philadelphia, especially for the purpose, accommodating at the present time upwards of fifty men and women above the age of sixty-five, who have devoted at least twenty-five years to the art of teaching music in America. The building and its property are valued at over a quarter of a million dollars. It is amply endowed thru the Presser Foundation.

The next step in Mr. Presser's philanthropy was that of having the Foundation (established in 1906), inaugurate a department to take over his personal benefactions to musicians in distress. This is now known as the Department for the Relief of Deserving Musicians.

At the same time a similar department known as the Department of Scholarships assumed the control of the Founder's benefactions, in the way of helping students of music in colleges, especially those who desire to become teachers. In this way eighty-five institutions that have applied are receiving scholarship funds, amounting in each instance to \$200.00 a year. The Foundation has nothing selecting the student or students to receive the

scholarship other than providing that the student shall be recommended by the president of the college and the director of the music department.

The following is an extract from the regulations of the Department:

"The students so recommended shall be young persons of good character and ability who, without the assistance herein provided, would not be able to carry on their studies. Furthermore, they shall be students who are pursuing practical courses in music, and preference shall in all cases be given to students who aim to become teachers. Such students shall not confine their studies exclusively to music, as it is the desire of the Founder that the instruction of the student in said institution shall consist of one-third of what are commonly known as academic subjects."

The need for musicians with a fine general education is becoming greater and greater. Only one who is daily in the musical field can know how intense is the competition and how great the demand for real education among musicians. The call is not so much for great artists, who because of some phenomenal natural gifts, like Caruso, can average \$20,000 a concert, but for practical teachers who can carry the message of music to American schools and homes in the most scientific and the most artistic manner.

- One of the main purposes of the Scholarship Department of the Presser Foundation is to foster this phase of the work.

It is hard to believe that in this day there are musicians holding good positions as private teachers and in orchestras who are so ignorant that their conversation is occasionally on a par with that of the street cleaner. I can assure you that every now and then I meet one whose ignorance is as monumental as that of the Eifel Tower. The reason that such a condition exists is that the demand for music is enormous and there are no better educated musicians to take their places.

Not that education makes musicians. Many of the best educated musicians are quite without musical gifts. England has a surfeit of finely educated men in the musical

REASONS WHY STUDENTS CHOOSE PARTICULAR COLLEGES

(A paper read before The Presbyterian College Union.)

Frederick W. Lewis, President, The College of Emporia.

Why does the particular procession of students come up to our particular college autumn by autumn? Why not to some University? Why not to some other college like ours? What are the elements of strength and weakness in our college as gauged by our annual fall registrations? How far have we understood the mind of the prospective student in our public and private preparatory schools as indicated by the approach we have made to secure his matriculation with us? What features in the processes of student propaganda have been over-magnified and what features have been over-depreciated?

Such questions as these must have been in the mind of the President of the Union when he requested me to send out a questionnaire to ascertain the ruling considerations in the minds of students guiding them in the choice of their colleges. I had a guilty feeling about imposing a questionnaire upon my fellow presidents for of making many questionnaires there is no end. However, I accepted the responsibility feeling that his interest in this question was probably matched by a similar concern in nearly every college. The prompt responses and personal assurances have confirmed this opinion.

I say "nearly every college" for in the case of at least one college, McAlester, which is supplementing the law of natural selection by its admission of only a limited number of new students each year, and in the case of Park and Blackburn, which by virtue of physical necessity turn away hundreds of annual applicants, the problems incident to proper numerical expansion are greatly lessened and might be considered as reduced to a negligible quantity. However, even where it is possible to employ selection based upon scholastic, physical, and moral fitness in making up a fixed quota of students, a college still has some interest in

understanding the whys and wherefores in the eager minds of its inspiring freshman group.

Blanks were sent to twenty-five colleges. Answers were received from seventeen in time for tabulation. Two came later. There were good reasons for the failure of the others to comply.

Returns were received from 2894 students. The blanks contained twenty-two questions. There were 10,993 answers or an average of nearly four to a paper.

The form of the questionnaire is on page opposite Table I.

It is creditable to the students that they took the questions seriously. There was no evidence of fun-making or any indication of the possibility that the impressions recorded were insincerely or carelessly written. Of course there were some student inaccuracies and eccentricities that excited a laugh among our professors and student helpers engaged in the work of tabulation; e. g. on one blank in answer to the question, "Did you come here because of the prominence of this college in athletics?" there was a painful groan, "Gosh no!" On the same blank by way of supplementary illumination under the *omnium gatherum* question, No. 22, there was this remark, "Soft words and low music tricked me into it and now I haven't ambition enough to leave." Another student, who said she came entirely on account of a special course in business, stated laconically at the bottom of the page, "Didn't find business course." She must have spoken feelingly for her name was suggestive of financial interest.

However, aside from a few blanks like this which put spice into the task, the answers reflected inward states of mind in past experiences with scientific fidelity and the results as found on the tables submitted constitute data which are more reliable than I had at first hoped. This statement is made because of the way in which the totals were found to tally with the totals reached in the only other large-scale investigation of the sort. This comparison will be made later.

In compiling the data the following procedure was

followed. A study of the individual blanks in a given college was made and the results made available for assimilation into the ultimate condensed table. Inasmuch as some students were greatly influenced by a few factors and others by many, and often some factors were more important than others in determining the choice of a student, it was necessary to give different "weights" to the factors entering into the decision. For example, a student may have been largely influenced by a former student and slightly by a pastor, special courses, athletic achievements, etc. It would be an inexact picture of influences operating to score each influence equally. On glancing over blanks taken at random from several colleges it was seen that few recorded more than ten factors. It was decided, therefore, that a gradation of "weights" from one to ten be kept in mind in reading and scoring each student-blank. When one factor determined the choice, the blank was recorded in column one, meaning the whole influence. When two factors operating with equal force were given by the student, his blank was recorded under column two in the case of the two proper questions. If ten factors were entered in the blank by the student, the student-blank was recorded under column ten in the case of the ten factors. Thus, ten influences being checked in column ten, each one was one-tenth of the total reason for the student's choice. Similarly if there were five reasons given, each reason was one-fifth of the total, and was listed in column five. The fractional form was employed at the top of the columns for the sake of easy computation. Sometimes by use of the word "largely," or by underscoring some answers, or by other inimitable and unmistakable student ways, some factors were shown to be dominant among many minor ones. In such cases one factor might be one-half the actual influence determining the student's choice, and three other factors, one-sixth of the total influence. These would be recorded, the first in column two, the other three in column six. This method seemed to be justified as the records were read. To be sure not every blank was perfectly "weighted" in every particular but if one factor was over-weighted in one blank it was possible

that it would be underweighted on another blank. Thus one error would correct another error.

Having transferred the individual student-blanks to the individual college record blank, the records of all the colleges on each question and on each "weighting" were added, keeping the "weightings" separate, and giving the total-blank record. See Table 2.

QUESTIONNAIRE

WHY DID YOU COME TO_____

Your answer to these questions may help us to present the right inducement to others in the future. More than one thing probably led to your coming—in such case please answer, "In part," "Largely this," etc.

1. Because some relative attended?
2. Because a student or former student persuaded you?
3. Because a friend was coming?
4. Because your parents favored this college?
5. Because of the influence of a high school instructor?
6. If so, was he a former student?
7. Because of the influence of your pastor?
8. If so, was he a former student?
9. Because of advertisements in a newspaper?
10. Because of letters, circulars, or other printed matter?
11. Because some professor or field man solicited you?
12. Because of moral and religious ideals of college and city?
13. Because of college's reputation in debating?
14. Because of college's reputation in athletics?
15. Because it is a men's college?
- 15½. Because it is co-educational?
16. Because it is a college instead of a university?
17. Because of special courses?
18. Because of a comparatively low rate of tuition cost?

TABLE I, SHOWING REASONS FOR ATTENDING PARTICULAR INSTITUTION

Blanks filled out by 2894 students in seventeen colleges.
The columns show reasons according to their fractional weight.
Key to figures at left found in student blank.

QUESTION	1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/10	TOTAL ASSIGN- ING ANY WEIGHT	TOTAL TO SAME UNIT	TOTAL ON BASIS %
1.....	19	91	48	83	55	73	32	58	15	101	575	1482	6%
2.....	16	95	77	97	74	90	51	77	31	157	765	1804	7.3%
3.....	7	40	49	67	51	77	36	52	18	114	511	1080	4.4%
4.....	70	282	144	136	104	106	68	104	28	168	1210	3741	15.3%
5.....	2	34	30	50	34	48	26	40	15	75	354	734	3%
6.....	1	15	17	20	15	35	23	29	11	52	218	414	1.6%
7.....	4	25	22	34	28	41	24	49	19	113	359	675	2.8%
8.....	0	7	6	14	9	22	12	24	9	53	156	255	1%
9.....	1	2	12	6	4	15	9	12	9	37	107	183	.7%
10.....	1	27	39	69	66	75	44	72	18	149	560	1026	4.2%
11.....	1	30	25	33	20	45	18	43	8	74	297	591	2.4%
12.....	9	102	109	142	115	124	75	113	36	209	1034	2270	9.3%
13.....	0	4	3	8	13	10	18	21	12	71	160	231	.9%
14.....	1	25	42	56	43	70	35	54	19	119	464	874	3.6%
15.....	0	17	31	36	74	21	19	40	13	45	296	550	2.2%
15½.....	2	15	21	66	63	65	40	60	21	142	495	861	3.5%
16.....	7	56	57	116	94	107	71	103	31	187	829	1647	6.7%
17.....	13	61	57	67	40	57	25	48	17	112	497	1127	4.6%
18.....	3	39	49	91	84	107	64	92	36	174	739	1381	5.4%
19.....	10	94	69	75	72	86	45	72	20	117	660	1568	6.4%
20.....	0	11	14	15	15	22	13	14	7	38	149	253	1.4%
20½.....	1	10	6	6	17	20	6	28	9	37	140	354	1%
22.....	40	56	58	61	45	63	29	39	17	85	493	1414	5.8%

19. Because of the opportunities for self-help?
20. Because of a fraternity or sorority?
- 20½. Because of absence of fraternity or sorority?
22. Because of other reason or reasons?

Signed:

In further explanation of this table, let us examine Question 1. The question is, "Did you come to this college because some relative attended here?" It appears from the table that with nineteen students this was the sole reason. With ninety-one students it was one-half the reason, with forty-eight students it was one-third of the reason. Passing over to column ten, with 101 students it was approximately one-tenth of the reason. The totals under Question 1 show that 575 ascribed some influence, large or small, to the factor indicated. The next figure is the total influence reduced to the same unit. This was reached by multiplying 19, the answer, under column 1, by 10, multiplying 91 by 5, multiplying 48 by 3 1-3, etc., according to the proper coefficients in each case. Finally the importance of the factor indicated in Question 1, is reduced to a percentage basis.

The first thing that strikes the attention in the column of totals is the fact that parental influence registers 15.3% and that all the personal and local influences exclusive of that of the field agent added together total 38.8%. The strength of the personal elements suggests that the background out of which our college students come is a mediated experience. It has been made up for them by parents, teachers, pastors, and friends. In spite of the discrimination which some few may independently exercise, it is apparent that the majority of the young people in our high schools are under certain local restraints and traditions. Within certain limitations, the college choices of those included in this investigation were pretty largely dictated by the circumstances of their immediate environment.

This revelation of the power of personal influence and example in determining college choices is confirmed by the results of a questionnaire submitted to the registrars of the

country for a report to the Tenth Annual Meeting of the American Association of Collegiate Registrars held at Washington last April. The consensus of the opinions of the registrars was that sixty per cent of the students were influenced to select their respective colleges because of personal contacts: a relative, a pastor, a teacher, a chum whom they idealized, was a graduate or a student or at least a booster for a given institution and the force of personality proved the dominating factor in their decisions.

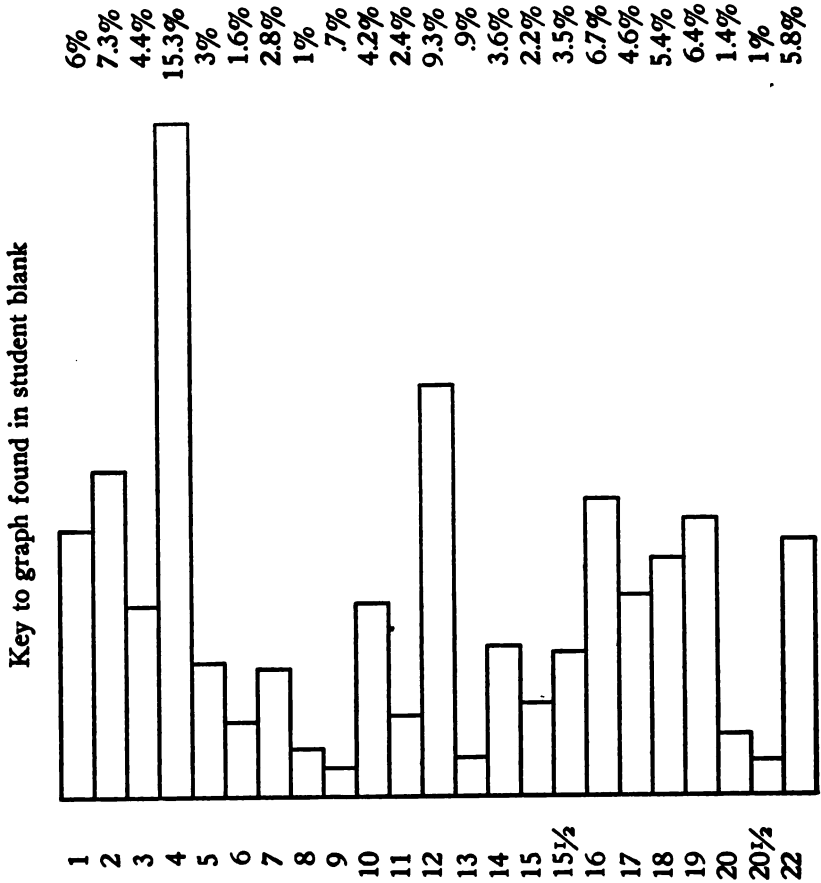
A word of qualification should perhaps be added in regard to Question 4. Altho there were 352 students out of 2894 who considered parental influence a major factor and altho 1210 students gave it some weight or other, yet there was a disproportion between men and women in these replies. Out of one hundred answers taken from ten colleges assigning parental influence as a main factor, seventy-two answers were from men and twenty-eight from women.

The next three questions concern the direct effort made by the college to attract students. It is somewhat disconcerting to find that college advertising is but a seven-tenths of one per cent factor, that college printing only registers 2.4%. The total is exactly the same as the single influence of students or former students.

In order, however, properly to interpret this phase of the report, we should be obliged to learn how much use is made of newspaper advertising, circularization, and field canvassers. The report on Educational Publicity at the Registrars' Meeting declared upon the basis of the questionnaire mentioned (1) that no business organization or interest in the country is so poorly and unsystematically advertised as the educational institutions; (2) that in these reconstruction days following the war, there has been more advertising done by educational institutions than ever before. Of three hundred schools reporting in their questionnaire, eighty-one have publicity agents.

If a much smaller proportion of the colleges in this particular group employ publicity agents, if very few engage in direct newspaper or magazine advertising for students, if circularization is spasmodic and unscientific in

TABLE II, GRAPH SHOWING RELATIVE IMPORTANCE OF THE REASONS GUIDING STUDENTS IN ELECTING PARTICULAR INSTITUTIONS



many instances, and if a large number of colleges do not employ student solicitors, then there is little in the answers of this group to discount the effectiveness of these means of approach.

A detailed examination of the answers to Question 10 shows nine colleges which seem to have profited much more from their printed matter sent from the college office than did the other eight. The percentage of this factor would have been considerably larger had it not been for the very small showing in the latter group.

Question 11 pertaining to field men is hardly of great value when lumped without further analysis. For instance, if this features as a factor not quite half as heavily as college publicity we cannot say it is valuable just in that relative proportion without knowing to what extent this method is used. If seven colleges use field men and this method produces satisfactory results, this would hardly make a fair showing against ten colleges which secure students in other ways. As a matter of fact, in seven colleges 206 students ascribe some weight to this factor while in the remaining eleven only ninety-one students checked it.

The remaining questions are concerned with definite attractions which the college offers and it is gratifying to note that there is such a hearty response, comparatively speaking, to Question 12 relative to the moral and religious ideals of the colleges. This factor registers 9.3% or as much as the combined attractions of athletics, special courses and opportunities for social enjoyment.

Presbyterian loyalty to our colleges may not seem a very powerful motive when comparisons are made between the number of Presbyterian students found in our colleges and the number in state universities, but it is certainly significant that those students who do come to us are drawn to a very appreciable degree by the idea of church connection. This seems to shed some light also upon the strength of the parental factor as indicated in the answers to Question 4. It would be well to bracket in the mind these two percentages. They evidently belong together.

As might be anticipated, distinction in intercollegiate

debate is not a strong factor in determining student decisions. Park College is the only institution on the list where this operated to a respectable degree. Even there, however, with Park's remarkable eminence in forensics, this factor was weaker than almost any other.

As for athletics, either the reputations of our colleges in this regard are not very much to their credit, or our students have not been candid on this point, or athletics as a drawing power have been tremendously exaggerated. The percentage of influence is 3.6%. Only one student in six includes it in his list of motives, and even then it is relegated quite largely to the columns of least importance.

Question 15 is of minor importance as all the colleges in the group were coeducational but two.

The answers to Question 16 taken together with scores of supplementary remarks about the value of small classes and the method of the personal touch found in small colleges show that our students give their assent quite positively to the arguments for the college as compared with the university. I am inclined to think we should have given this question a higher score.

Question 17 is a definite question and the answers are valuable for individual colleges in determining to what extent the curriculum features in attracting students. The answers to the second part of Question 17 should be important for determining whether special features are valuable for pulling students. It is conceivable, for example, that Domestic Science would be a course that would attract students though we would hardly eliminate history because no student had specified history as a course which brought him to college. Perhaps some courses, as in the course of advertising, may be used as "leaders."

The answers to Question 18 show that more than one in six students was attracted by the comparatively low average rate of tuition in our colleges. It would be interesting to know what tuition is charged in our various Presbyterian institutions. Kansas colleges had the very low rate of \$60 until the period of the high prices. To the best of my knowledge, the College of Emporia at \$80 is now charging

more than any other denominational college in the state unless Washburn be included in this class. Yet, even at that figure, the fees of the state university are said to be so large as to make no very great difference to the student in this item of expense.

The figures relative to the drawing power of self-help opportunities are very significant. Six hundred and sixty young people emphasized this factor. Remembering that, except in the case of Park, these must have been for the most part young men, it will be recognized what a large portion of our young men are attracted by this consideration. In addition to Park, Henry Kendall, McAlester, James Milliken, and the College of Emporia show very large numbers of students attracted by self-help opportunities.

Question 20 relates to the influence which the presence or absence of secret societies exerted. This question is only negatively important for there would appear to be only two colleges where fraternities or sororities exist. The absence of these organizations from so many institutions seems to indicate that there is a consensus of opinion to the effect that though the fraternity at its exceptional best may exercise a wholesome scholastic, social, and moral influence, as a rule it is detrimental to the personal and academic life of the students and is, therefore, barred from the campus.

Question 21 is a very important one for the colleges which make a systematic campaign for students, as it determines quite plainly the time when the campaign should be made intense. Unfortunately the questionnaire was not well worded to secure the largest amount of usable information. It should have been worded so as to elicit the reply as to the number of weeks, months, or years before entering college. However, over half the students, much to their credit, answered in this latter form and a special table was compiled from their answers. It speaks for itself. Out of less than 1500 students over 900 made their decisions in the last three months before entering college. And of these nearly half decided in the final month!

TABLE III, SHOWING WHEN COLLEGE CHOICES WERE MADE

The columns indicate 2 months or less, 3 months or less, etc., before matriculation.

	1 Mo.	2 Mo.	3 Mo.	6 Mo.	1 Yr.	2 Yr.	5 Yr.	5 Yr. More than
1. Alma	26	15	8	3	7	5	3	3
2. Col. of Emporia..	60	19	18	16	18	10	13	8
3. Henry Kendall ..	22	18	8	9	3	0	3	2
4. James Milliken ..	43	17	30	17	27	7	4	2
5. Lincoln	9	2	5	0	0	0	0	0
6. MacAlester	44	22	24	16	22	7	4	8
7. Missouri Valley..	17	8	6	5	5	0	1	0
8. Park	8	1	9	9	25	5	5	12
9. Trinity	26	13	17	13	14	9	4	18
10. Wash. and Jeff..	38	38	40	19	35	14	9	9
11. Westminster	29	14	2	6	4	1	3	4
12. Grove City.....	29	18	17	10	12	2	2	0
13. Huron	9	5	5	1	12	1	2	1
14. Lake Forest.....	17	6	5	6	1	1	1	0
15. Albany	21	10	5	4	3	2	0	0
16. Hastings	18	17	9	15	15	7	2	7
17. Col. of Idaho....	27	19	11	4	8	4	1	1
Totals	443	242	219	133	211	75	57	75

Question 22 is more valuable for each college than for all together. A reading of the miscellaneous answers here found gives one the impression that they contain little more than specifications under or modifications of the answers already given above, except in one particular and it is an exceedingly important item.

569 students take pains to say that a main reason why they chose their colleges was because they were located in their home towns or because they were a very short distance away. Upon reading an answer of this kind the blank was put aside and no reckoning was made of the other answers as it was considered that they were of negligible importance in view of the compelling factor of proximity. This discarded twenty per cent of the reports.

I have stated that some color was lent to the validity

of the conclusions reached by checking up with another questionnaire.

The only other large scale investigation of this sort was made in 1917 as a part of "A Statistical Survey of Illinois Colleges" by Mr. B. Warren Brown, Survey Secretary of the Council of Church Boards of Education.

Blanks were returned from 2543 freshmen in 22 colleges. There were ten questions. Students were asked to check 1, 2, 3, opposite the questions in the order of importance in their experience.

Seven of the questions agreed with ours although in one or two cases it was necessary to add our totals to make a comparison with some more comprehensive question.

The following is the comparison of percentages of influence in determining student decision.

1. The location of institutions; Illinois survey, 23%, ours, 20%.

2. Influence of other students; Illinois survey, 11%, ours, 11.7%.

3. Religious life of institution; Illinois survey, 6.8%, ours, 9.3%. This disparity is partly accounted for by the fact that this motive scarcely figured at all in the selection of the University of Chicago and very slightly in the case of Northwestern and Knox.

4. Social and athletic life; Illinois survey, 5.1%, ours, 6%.

5. Influence of field worker; Illinois survey, 2.5%, ours, 2.4%.

6. Opportunities for self support; Illinois survey, 7.3%, ours, 6.4%.

Considering the fact that we asked twenty-two questions to their ten, that the students did the weighting on their blanks, while we had to assess each blank ourselves, and that their answers were all from freshmen while ours were from members of all classes, the close correspondence of totals is very interesting and gives rise to the hope that this investigation may be of some value in helping us to choose wise measures in our approaches to prospective students.

BULLETIN

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The Preliminary Report of the Association Commission on the Distribution of Colleges

Edited by

Robert L. Kelly

Executive Secretary of the Association

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Dr. R. L. Kelly, Executive Secretary of the Association of American Colleges.

REPORT OF THE COMMISSION

READ BY PRESIDENT THOMAS

There are Committees and Commissions whose Chairmen do all the work and the other members sign carbon copies and return them unamended to the Chairmen, their generous encomiums interspersed with regrets that they have been so much occupied with other matters. Your present Commission is not of that kind. The Chairman has done very little of the work and has served chiefly as compiler of the contributions of his associates and of the valuable and important material placed at the disposal of the Commission and of its members in the pursuit of their particular studies by Dr. Robert L. Kelly, Executive Secretary of the Association. The Commission is also indebted to Dr. Clyde Furst, Secretary of the Carnegie Foundation, for helpful counsel and co-operation.

QUESTIONS CONSIDERED

The Commission has endeavored to formulate a judgment as to whether or not there are too many colleges in their particular studies by Dr. Robert L. Kelly, Execu-

the United States, to estimate the probable growth of our present colleges, and to inquire as to the need for the establishment of new institutions. We have studied the influence of transportation on the establishment of colleges and in the Executive Secretary's office maps and charts of great interest and importance have been prepared showing the relation of transportation systems to the development of the nation's educational facilities, as well as charts illustrative of other phases of our inquiry. Investigation has also extended to the relation between denominational strength and the location of church affiliated colleges, and to the question as to how many high school graduates there should be in a territory to warrant the founding of a college.

HOW MANY COLLEGES ARE NEEDED?

If we attempt to answer how many colleges are needed in the United States, we must set up some estimate of the number of American youths who will profitably attend college in the next fifty years. At the present time, if we define a college as an institution of higher learning requiring for admission the completion of a four-year standard high school course or its equivalent, we include as colleges not only all institutions ordinarily so listed, but also all teachers' colleges (normal schools), admission to which is based on a four-year high school course, all types of technical and other schools based on completed high school work, but we exclude the graduate schools and colleges based on college graduation.

While no very definite figure for the number included within this classification can be obtained, the best estimate we can secure points to 500,000 young men and women in college, technical school, or teachers' college this year. (455,000 in colleges and technical schools and 45,000 of college grade in normal schools.) With the population of the United States 106,000,000 this would mean an average of 1 college student per 212 population. This estimate is probably low.

In Ohio with a population of 5,750,000 there are about

27,000 students this year, or 1 student to 213 population. In the cities of Columbus, Salt Lake, Pittsburgh, Seattle, and Cincinnati, all large cities within which one or more colleges are located, the enrollment of local students was 1 to 145, 145, 147, 150, and 185 respectively.

These several figures would seem to indicate that where educational facilities are adequate we should at the present time have provision in colleges for about 1 in every 200 of our population.

Or, stating it another way, the territory that has adequate educational provision for less than 1 in 212 of its population is less adequately equipped in this line than the average needs of the country demand at the present time.

If we are willing to accept these figures as a rough approximation of the present needs for college training, what should we anticipate as the probable needs in the next few decades?

The answer to this question depends upon so very many variables that only a crude guess can be made. There is, however, some basis for a guess. The college is first dependent on the high school graduates for its supply of students. The growth of the public high schools during the last 20 years has been prodigious, and the growth shows no decline. There is further a distinct movement in the states to provide high school education for all the youth of high school age who will take it, and there is a constant broadening of the high school curriculum which increases the public interest in the high school course. At present from 18% to 50% of the high school and secondary school graduates enter college. (Bureau of Education estimates average of 28% for public high schools and 39.2% for private.)

We can safely assert that the total number of high school graduates is rapidly increasing, that the interest in high school is largely increasing and that over 30% of high school students enter college. It is certainly evident that no serious diminution of the supply of high school graduates to the colleges immediately confronts us.

If now the high school facilities continue to grow with increasing demand, should we look forward ultimately to having all youth of 18-22 in college? Assuming the figure of the draft boards, that there are 1,000,000 men in each year of age from 21 to 31, we may perhaps safely assume that there are in the country about eight million men and women 18-22 years of age. At the present time 500,000, or 6%, of this number are in college. (Note the statistical department of the Bureau of Education estimates that 3.3% of those persons belonging to the age group from 19 to 23 were in college in 1898 and that 4.8% of this group were in college in 1916. Probably these figures would justify us in assuming that over 5% are in college this year.)

The Army Intelligence Test given to a million and a half men indicated that 15% of our citizens are of "superior or very superior" intelligence, eminently capable of doing college work, and of a capacity that they would profit largely from this training. On the other hand, recent tests of some eight thousand college students in residence last year in two institutions showed 80% of the entire enrollment of "superior or very superior" intelligence; that is, a part of this select 15% and only 20% of lower intelligence. We could conclude perhaps that when this 15% of highly intelligent youth of our population of college age all go to college we will have reached our maximum college enrollment.

This would mean at present about 1,200,000 in a population of 106,000,000, and, in round numbers, 1 college student in 100 population, or a little more than twice the present relative college population.

These estimates are admittedly crude, yet it is a conclusion worth reaching even tentatively that the United States in its present educational development finds need of college facilities for 1 student to approximately 200 of the population, and that we need not contemplate provision for more than 1 student to 100 population. These estimates may be studied in comparison with the figures recently published by the Institute of Public Service, which has

noted that if the percentage of increase of college attendance from 1914-1920 be maintained to 1950, the United States will have in that year 1,127,500 students. Undoubtedly we shall see a larger college attendance in the years ahead, but we need not react too violently from complaint and criticism over the excess of colleges to alarm that the nation is going bankrupt for college opportunities. It is sufficient to conclude that there is a field for every college reasonably well located and adequately equipped and supported for good college work, together with a reasonable number of new institutions in regions of large growth in population or which are established to meet special needs, and that an important task for the nation is to strengthen the weaker colleges until they are fitted to take their share of the work of educating America's youth in a worthy manner. Of the 673 colleges reported in 1917-18, 495 had less than 500 students, 252 had less than 200 students. Only 178 had 500 students or over. Contemplating a probable increase in enrollment of 40,000 students a year, which perhaps is a reasonable estimate, we may conclude that the development of existing institutions can provide for future needs. We have enough colleges, if they prove to be properly located. i

Undoubtedly a few more colleges will be and should be founded, but apparently we should look more as a nation toward the development and growth of what we have than toward the establishment of others. Further, such additional colleges as may be established should in every case either serve a territory now very poorly served, or it should serve a functional need that can not well be served through existing colleges.

In view of these figures, of the distinct tendency of existing colleges to grow, and of the fact that from an economic point of view colleges should be encouraged to build up enrollment of at least 400 or 500 students, from these considerations it would seem probable that from 400 to 500 good colleges and universities can serve all the students who will probably enroll in America in the next few decades, at least up to 1,000,000.

WHAT CONSTITUTES A FIELD FOR A GOOD COLLEGE?

The Carnegie Foundation, the General Education Board, and the recent studies of the American Educational Survey all have called attention to the fact that about 50% of the students attending a typical American college come from within a radius of 50 miles of the college. The ultimate size of the college must also bear largely on the question of the ultimate college needs of a territory. On the theory that a college or university of any size can be advantageously maintained, one can justify the establishment and maintenance of some sort of a college any place, or on the other hand argue that one institution in a state is ample provided it is large enough.

In "The Efficient College," a report of the Association of American Colleges (Volume III, Number 2—March 1917) the minimum enrollment in the Efficient College was fixed at 500. An efficient college was shown to be one that offered a reasonably generous range of courses and that had adequate library and laboratory facilities. Such an institution necessitated a considerable expenditure. If the number of students should be small the per capita cost would be very high. As the numbers increased the per capita cost diminished until at an enrollment of 400 to 500 it became nearly stationary and showed little or no decrease for enrollment increase beyond this number. An equipment and staff adequate to an efficient college can handle about 500 students. When this number increases above that figure duplications of staff and equipment are necessary to such a degree that little or no further cut in the per capita cost seems possible.

It seems reasonable then in considering the distribution of colleges that in general we should anticipate the growth of American colleges to 500 or more students, and that we should not regard as generally desirable two or more colleges in a territory that cannot provide a total of considerably more than 500 students.

These statements should in no case be construed as implying that smaller colleges adequately endowed to provide a full staff and generous equipment for a smaller

enrollment are not desirable. Wherever in the country such small colleges are maintained they can do superb work. However, in the face of the enormous increase in the demand for college training and of the wholly inadequate support of the great majority of existing institutions, it would seem most desirable to consider only the most economical method of adequately meeting the situation. From this point of view it does not seem desirable to establish a new college either in a territory lacking a college that cannot be expected ultimately to provide 500 college students, or in a territory where existing colleges growing to an enrollment of 500 students or more can provide adequately for future needs. It also raises the question as to the wisdom of maintaining two or more existing colleges in a territory which does not now and probably never will provide more than a reasonable enrollment for one college.

If now we attempt from the above to state the conditions as to population which should exist for the favorable maintenance of an efficient college, we must proceed somewhat as follows: A college enrolling 500 students will probably have to get 50%, or 250 from within a radius of 50 miles. Assuming that its territory will supply 1 student from every 200 population, the 50-mile radius should include about 50,000 people and should not be largely drawn on by any other nearby college. With unusually excellent high school facilities and enthusiasm for higher education a territory may ultimately send 1 student to college for every 100 of its population. On this basis a population of 25,000 within a 50-mile radius would supply the local enrollment for a college, but this would be unusual.

It is of course to be recognized that old colleges long established on high standards generally draw a much larger percentage of students from outside their local territory. This fact, however, cannot weigh in the foundation of a new college or in considering the future growth of a small weak college. Generally speaking, unless the local field of 50-mile radius can supply half of its desired enrollment it will never be supplied.

State	Population	No. of students on basis of 1 to 200 population	No. of colleges	Students available per college on basis of 1 to 200
Alabama.....	2,348,174	11,740	10	1,174
Arizona.....	333,903	1,669	1	1,669
Arkansas.....	1,752,204	8,761	7	1,251
California.....	3,426,861	17,134	14	1,223
Colorado.....	936,629	4,698	9	522
Connecticut.....	1,380,631	6,903	5	1,380
Delaware.....	223,003	1,115	1	1,115
Dist. of Col.....	437,571	2,187	8	273
Florida.....	968,470	4,842	5	968
Georgia.....	2,895,832	14,479	16	904
Idaho.....	431,866	2,159	2	1,079
Illinois.....	6,485,280	32,426	35	926
Indiana.....	2,930,390	14,651	21	697
Iowa.....	2,404,021	12,020	26	462
Kansas.....	1,769,257	8,846	19	465
Kentucky.....	2,416,630	12,083	12	1,006
Louisiana.....	1,798,509	8,994	8	1,124
Maine.....	768,014	3,840	5	768
Maryland.....	1,449,661	7,248	14	517
Massachusetts....	3,852,356	19,261	18	1,070
Michigan.....	3,668,412	18,342	11	1,749
Minnesota.....	2,327,125	11,635	10	1,163
Mississippi.....	1,790,618	8,953	9	994
Missouri.....	3,404,055	17,020	22	773
Montana.....	548,889	2,744	3	914
Nebraska.....	1,296,372	6,461	10	646
Nevada.....	77,407	387	1	387
New Hampshire....	443,083	2,215	2	1,107
New Jersey.....	3,155,900	15,779	7	2,254
New Mexico.....	450,350	2,251	3	750
New York.....	10,384,829	51,924	34	1,527
No. Carolina.....	2,559,123	12,795	16	799
No. Dakota.....	645,680	3,228	5	645
Ohio.....	5,759,394	28,796	40	719
Oklahoma.....	2,028,283	10,141	7	1,448
Oregon.....	783,389	3,916	8	489
Pennsylvania.....	8,720,017	43,600	43	1,013
Rhode Island.....	604,397	3,021	2	1,510
So. Carolina.....	1,683,724	8,418	15	561
So. Dakota.....	636,547	3,182	6	530
Tennessee.....	2,337,885	11,689	19	615
Texas.....	4,663,228	23,316	14	1,665
Utah.....	449,396	2,746	2	1,373
Vermont.....	352,428	1,762	4	440
Virginia.....	2,309,187	11,545	21	549
Washington.....	1,356,621	6,783	6	1,130
West Virginia.....	1,463,701	7,318	4	1,829
Wisconsin.....	2,632,067	13,160	12	1,096
Wyoming.....	194,402	972	1	972

THE INFLUENCE OF TRANSPORTATION ON THE DEVELOPMENT OF COLLEGES

The history of Knox College, Galesburg, Ill., contains the statement that the colony which wished to found a community and a college at the same time, first sent to the West an "Exploring Committee" charged to find a location which accorded with certain specifications. The last specification is: "If a place on some great thoroughfare, such as a canal or navigable water cannot be obtained, it will be better to get into the country from 15 to 25 miles from such place, provided the country around be a good farming country. It should, however, be on some important road or where it is probable that such road would be opened."

This incident is interesting not only for its insight on the relation of transportation to college location, but also as an evidence that the colleges of America have not been located without careful consideration of the strategic advantages of their chosen site, as those advantages appeared at the time. This has not been true of all, but it is true of a larger number than is generally believed, since allowance is not always made for changes in transportation methods and systems.

The intimate relation between the development of American railways and the establishment and location of colleges is shown in a series of five maps:*

- A. Railways and Colleges 1850
- B. Railways 1860; colleges 1850-60
- C. Railways 1870; colleges 1860-70
- D. Railways 1880; colleges 1870-80

Railway mileage in the United States amounted to 23 miles in 1830; to 2,818 miles in 1840; and to 9,021 miles in 1850. The first map shows railway transportation and common roads in the United States in 1850 together with

*All maps in this Bulletin were prepared under the immediate supervision of Miss Lura Beam, Associate Secretary of the Council of Church Board of Education.

COLLEGES AND METHODS OF TRANSPORTATION IN THE UNITED STATES IN 1850.

Sources:
 Mitchell's Atlas - 1850.
 Colton's Atlas - 1854.

KEY
 ——— Railroads
 - - - Common Roads
 • Colleges

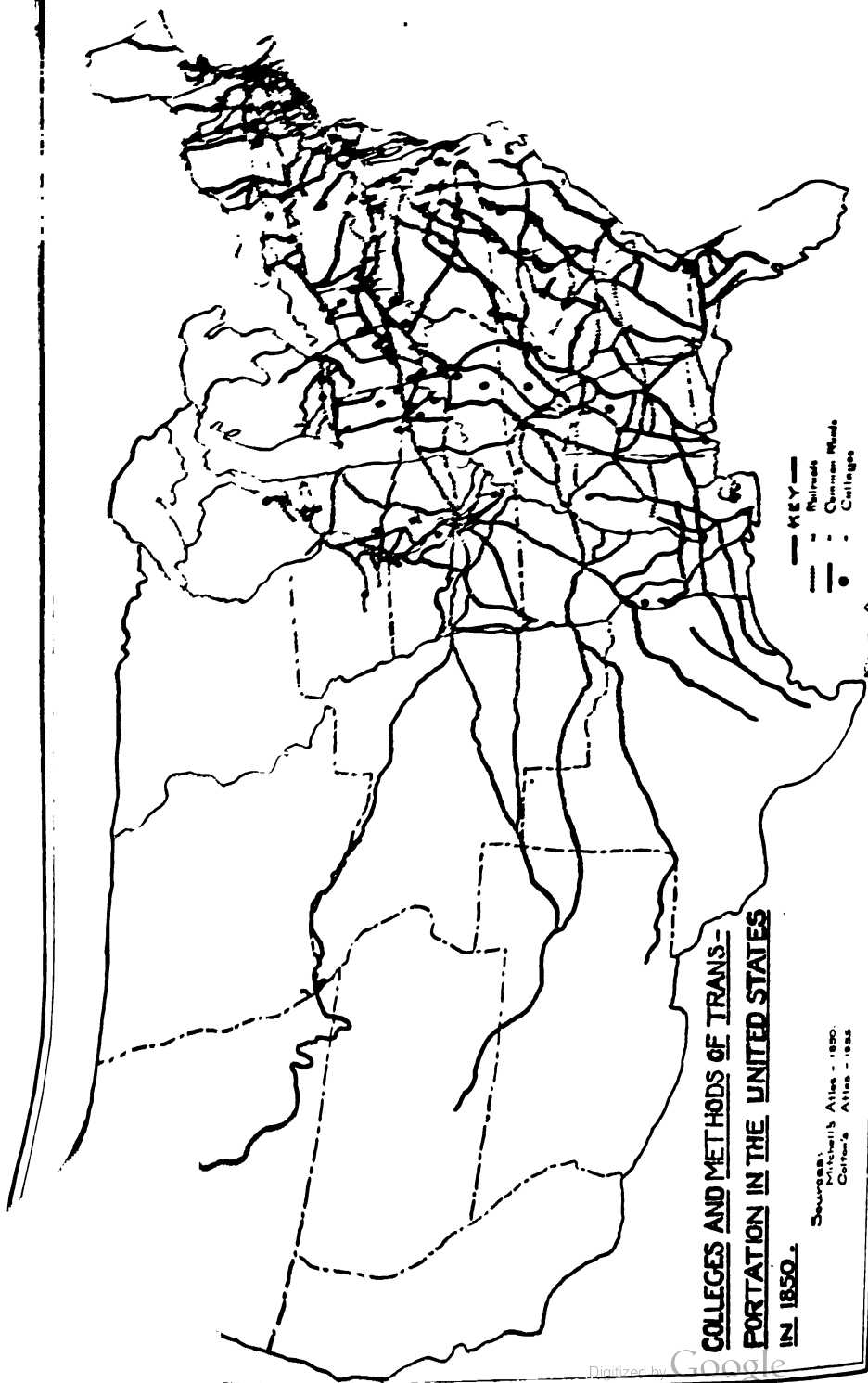


Figure A

in the decade 1880 to 1890, studied in conjunction with railways added during the same period.

It is interesting to note the relation of railway and located with some reference to the Oregon Trail and two cannot be found. Transportation west of the Mississippi in 1880 shows every college which can now be located, on

Figure A* shows the general tendency for colleges to be located on established routes of travel although there were numerous exceptions before 1850. Note the colleges on or near the old National Road from Cumberland, Maryland, to St. Louis, Missouri. A few colleges were on railroads in 1850.

Figure B. The dots indicate numbers, not accurate location. Between 1850 and 1860 about 70 colleges were founded in states having railroads, and ten colleges in states without railroads. More colleges were founded where there was the greatest activity in railroad building.

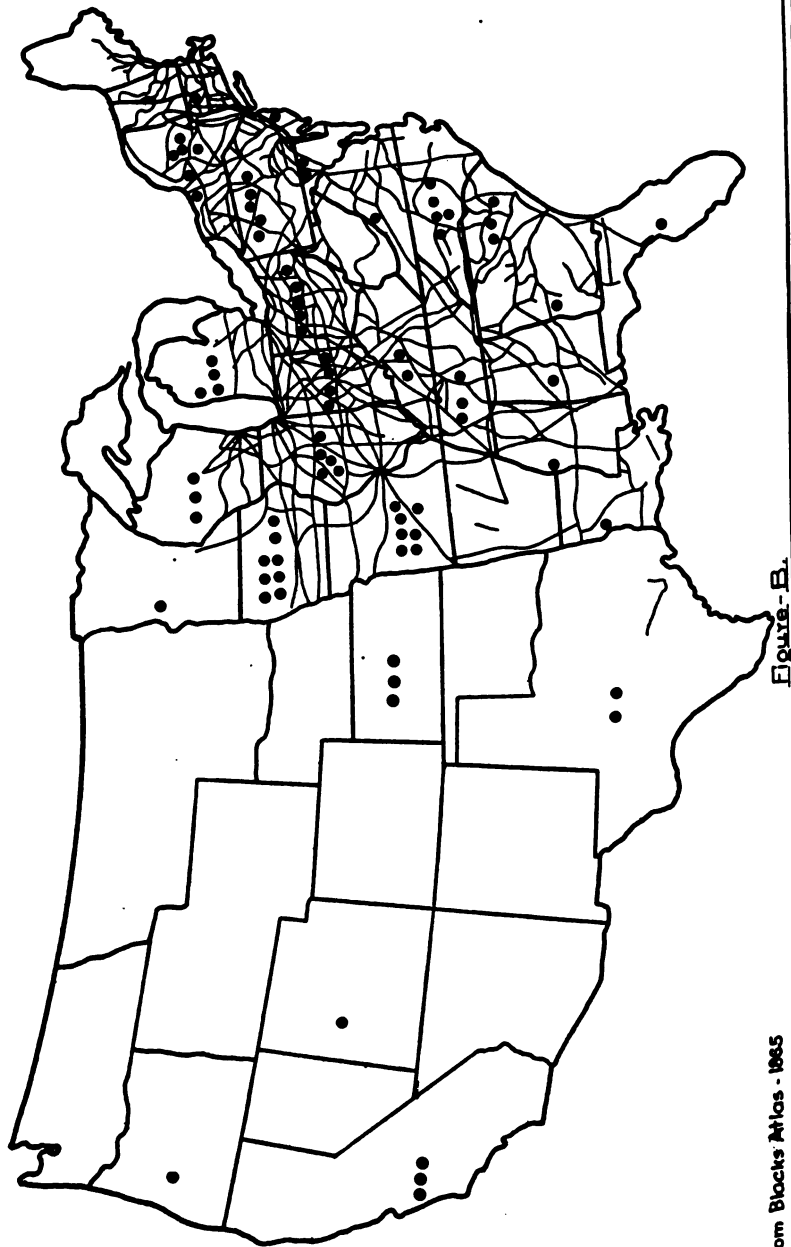
Figure C. In 1870 there was one transcontinental line and all of the colleges but five founded west of Missouri during the decade 1860-70 were located on or near this line. A few colleges were founded hundreds of miles from any railroad. Whitman was on the old Oregon trail.

Figure D. This figure gives a striking illustration of the relation between railroad construction and the establishment of educational plants.

*NOTE: The chief authority for the founding of colleges in this map and the maps following is the list prepared by Professor Andrew J. West of Princeton University. It was published under the title "American Colleges" in the monograph "Education in the United States," edited by President Nicholas Murray Butler for the Paris Exposition of 1900.

The maps used are those suggested by the map custodian of the New York Public Library for the periods studied. They have been compared with the maps by decades in "Principles of Transportation" by Emory R. Johnson, (1917) and found to agree in the trunk lines. Mr. Johnson's maps are more conservative and vary in certain minor branches. It therefore seems likely that atlases published several years after the decade may contain more than the roads established at the precise end of the period.

RAILWAY TRANSPORTATION IN THE UNITED STATES, 1860 —
COLLEGES FOUNDED IN THE DECADE 1850-1860 -----●



a railroad. This is also the case with the colleges founded in the United States up to that period, according to the list sponsored by Professor Andrew West of Princeton University in his paper, "American Colleges."

The next map shows railway transportation in the United States in 1860 together with colleges founded in the decade 1850 to 1860. They are not located exactly, merely put in the state, but it is easy to see that with small exceptions the increase is in the part of the country which is developing a net work of railways. The first transcontinental road was established in the decade 1860 to 1870. Seven institutions are located on the railroad, two are college development in Ohio and Virginia, as shown in the two maps:

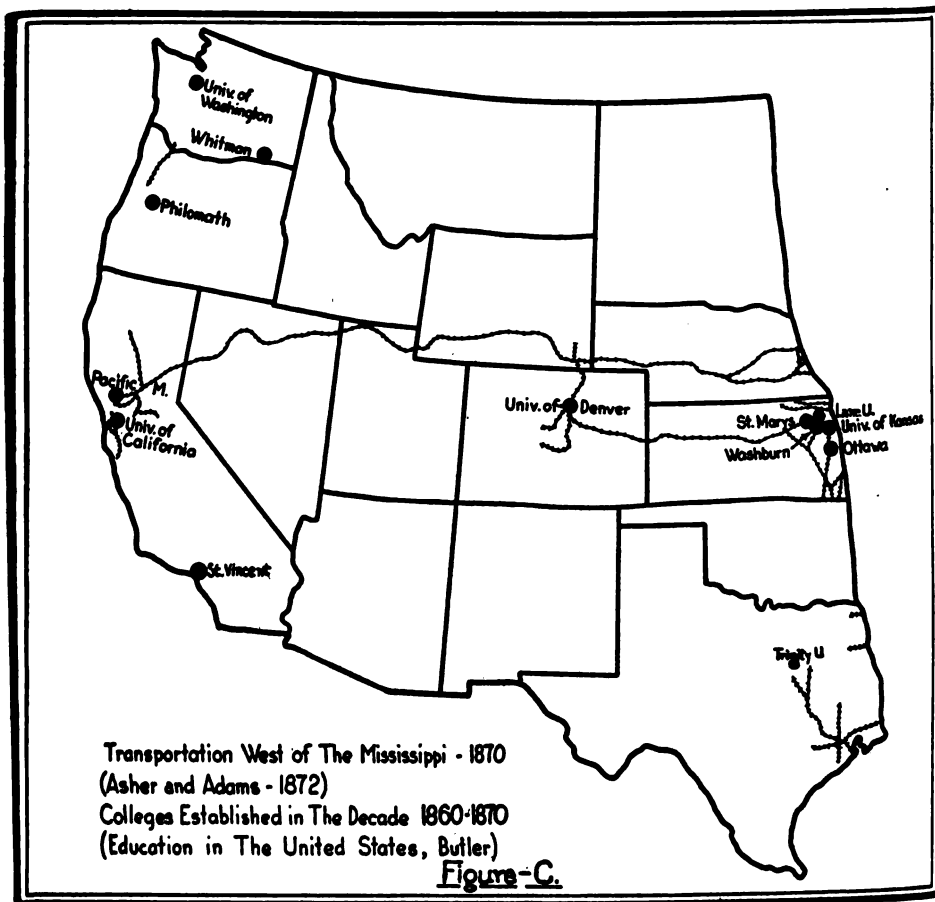
F. Railways and Colleges, Ohio, 1878

E. Railways and Colleges, Virginia, 1850

Ohio is taken for the reason that the center of population was just getting to it, crossing it, and going beyond it in every decade of the census from 1850 to 1890. Choice of the year 1878 depends partly on the fact that a good land commissioner's map was available for that year and partly on the fact that by that time many of the colleges had lived through a generation. All the institutions are on railroads except three, Hiram College (Disciple), Franklin (Anti-slavery), and Rio Grande (Free Will Baptist), and these are very near. The history of higher education in Ohio, however, indicates strongly that each one was founded by a colony with a distinct philosophy usually directly denominational. Approximately 20 groups are repre-

Figure F. In Ohio by 1878 the tendency had become established not merely to found institutions on railroads but at railroad centers. Note incidentally the number of denominations represented.

Figure E. In 1850 Virginia had eight colleges nearly all of which were on railroad lines. William and Mary was on a waterway.



sented in the founding of 29 institutions. The groups are sometimes the project of an individual, sometimes the project of a colony acting directly, or sometimes the project of a colony through its denomination conference. The Free Will Baptist institution was founded through the bequest of a wealthy donor and turned over to the denomination afterwards. The Farmer's College attempted to appeal to farmers and mechanics as a class by way of investment. Franklin College was founded in the anti-slavery faith and had schisms through all its earlier years.

Virginia is studied in the relationship of its colleges to transportation, both railways and common roads in 1850. This is an older state, founded by people of essentially different tastes and personality. In 1850 all the Virginia institutions were on railways except William and Mary which was founded in 1693 and was located with reference to water ways. Washington and Lee founded in 1749 had gotten one railway connection by 1850 and Hampden Sidney founded in 1776 had gotten one. All these pioneer institutions probably ought to be studied as the projection of personality rather than as the projection of material facilities.

There are many striking points of similarity between the building of the American railways and the institution of American Colleges. Some of these which have been brought out in the studies of Dr. Kelly may be briefly noted. The building of railways and the founding of colleges in the United States have kept remarkably even step. A comparison of a table of the growth of railway mileage and the figures in Dexter's American Education as to colleges established in the 19th century shows that in each

Figure G. In Montana the general rule is for the railroads to follow the rivers and the high schools and colleges to follow the railroads. A fairly good railroad map of Montana may be made by connecting the high schools with dotted lines. The Helena High School is accredited by the North Central Association.

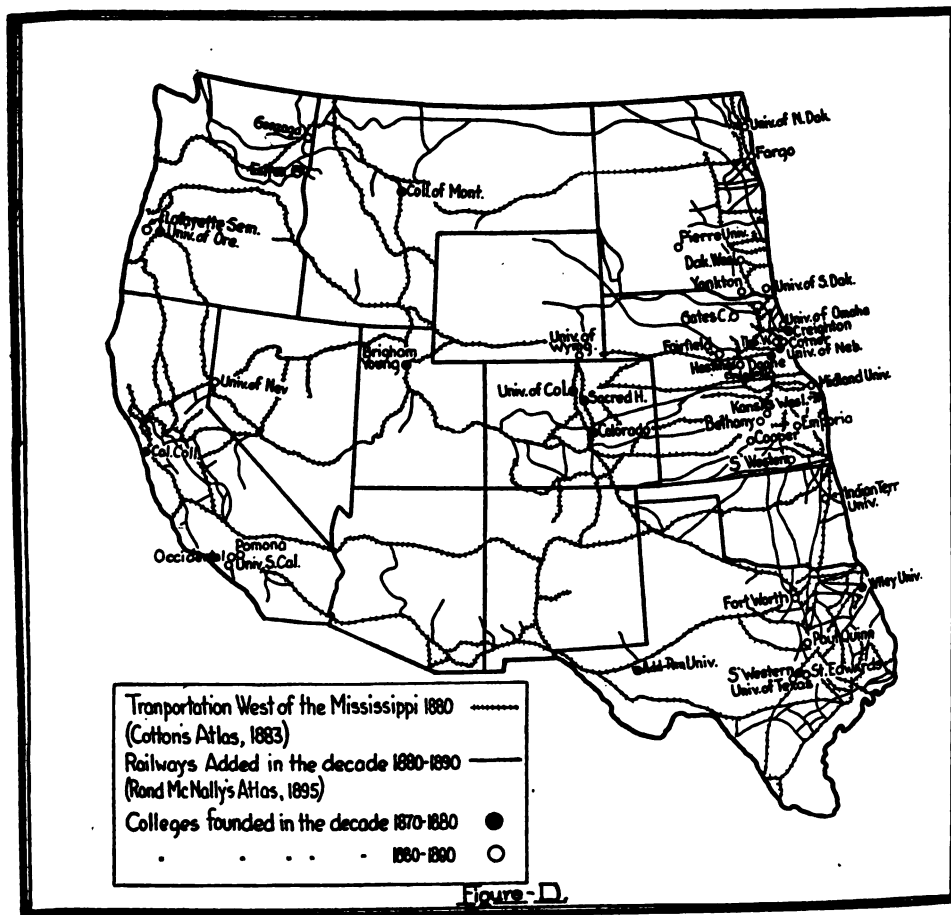


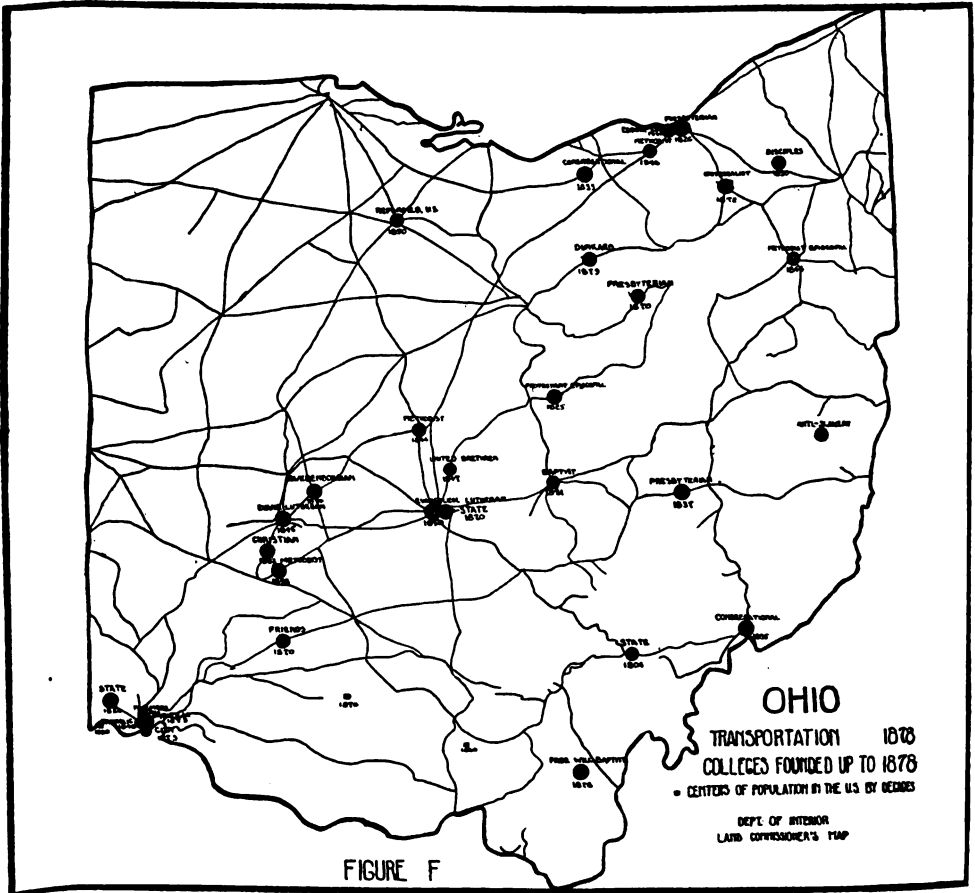
Figure - D.

decade as railway mileage has increased the number of colleges has increased in like degree. 1850 to 1860 was the great railway-building era and in that decade more colleges were founded in the United States than in any other of its history. Since 1890 there have been only minor railway extensions and since 1890 comparatively few colleges have been established. The great majority of American railways run from east to west, and college migration is from east to west and west to east rather than between north and south. Railway building leaped west in epochs: first eastern roads to the Great Lakes and the Ohio River; second, Chicago to St. Louis and to Kansas City by 1856: the epochs of college establishment are the same. Both railways and colleges have been recipients of Federal Land Grants. Up to 1870 the ambition of the railway was extension of mileage, improvement of service coming later. Up to the same period the founding of colleges received the emphasis, while latterly the stress has been on improvement of facilities. There is a "railway belt" extending approximately from east to west across the center of the United States, and the same area has been called "the college student belt." The "single track" era of the American railway corresponds to the simplicity and elementary character of college entrance requirements and curricula in the same period of time. Development in the national highways and the service rendered has kept even step with the increase of requirements and improvements in curricula, methods, and facilities in colleges and universities.

Secondary education in connection with railway facilities is shown in the case of Montana and Georgia. The Montana study shows that the high school map can be laid out almost exactly over the railroads, and the Georgia study* shows too that every high school accredited by the Association of Southern Colleges and Secondary Schools is located at the junction of two or more railways.

The maps of Montana colleges, also colleges of Georgia, Pennsylvania, Oklahoma and Ohio, if divided into

*The Georgia map is not reproduced in this issue.



those on the American Council of Education list in 1920 and those not on that list will show that the listed institutions are at trunk lines.

A transportation map of the United States together with all the institutions enumerated on the American Council of Education list for the current year is now being prepared. Also, a second transportation map with all the institutions included in the Bureau of Education Directory for this year, but not listed by the American Council of Education.

REGULATION OF THE ISSUANCE OF COLLEGE CHARTERS

It has been an altogether too simple and easy matter to secure a charter for a college or university in the United States. The disposition has been to let any benevolent and ambitious group of people, or even a single individual, see what they could do, and without care or consideration to bestow upon them the invaluable privilege of conferring academic degrees. There should be in every state some constitutional or statutory provision to protect well-meaning persons from needless and even pernicious effort in the establishment of unnecessary colleges and institutions which have no rational prospect of becoming efficient and creditable to American education. For the safeguarding of academic degrees, for the honor of institutions already doing sincere and creditable work, and especially for the protection of youth in their ambition for thorough higher education, there should be enactment in every state somewhat as follows:

SECTION 1. A charter shall not be granted nor shall articles of association be issued to a corporation for educational purposes in this state empowering such corporation to grant degrees, until the State Board of Education shall issue certificate that the creation of such corporation will promote the general good of the state.

SEC. 2. The State Board of Education shall not issue a certificate under the provisions of section one of this act until it is satisfied that the proposed corporation has

VIRGINIA IN 1850

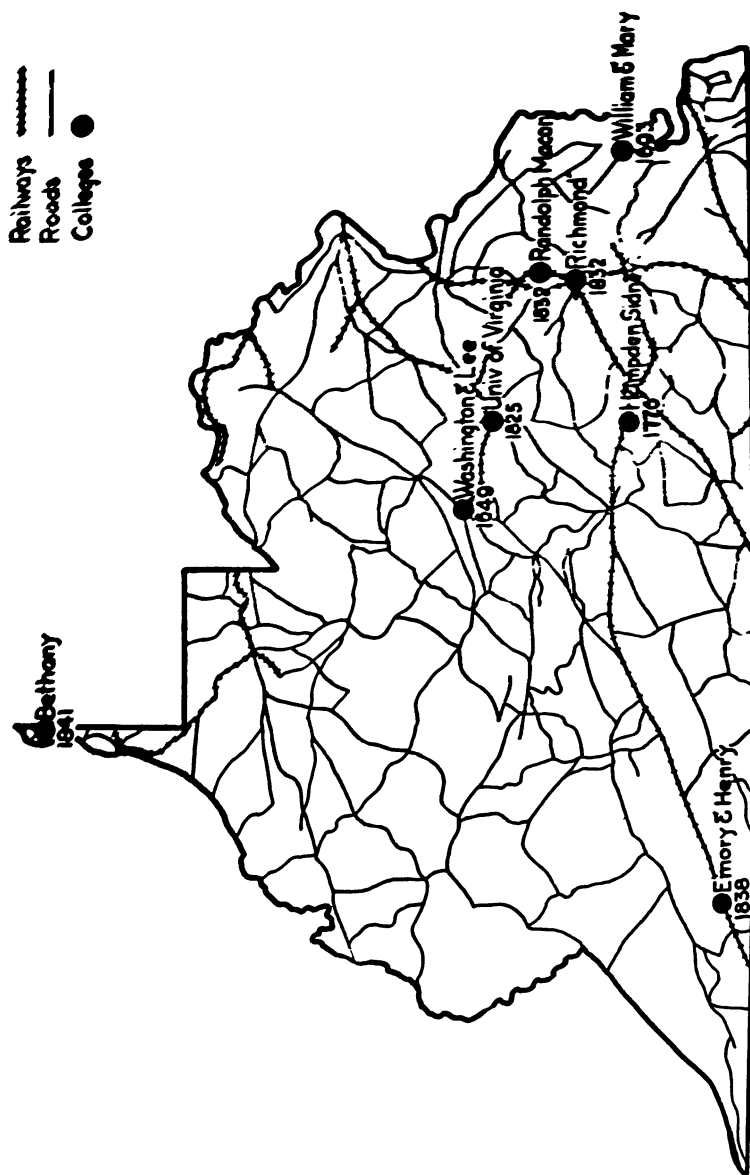


Figure - F

complied with the regulations of said Board for the type of institution for which it desires a charter.

SEC. 3. The State Board of Education shall make regulations defining the various types of degree-granting institutions, specifying the minimum requirements for the issuance of degrees for such institutions and the minimum requirements for admission to such institutions and the said standards to comprehend the amount of endowment, laboratory facilities, library equipment, number of instructors, and scope of curricula.

CONCLUSIONS

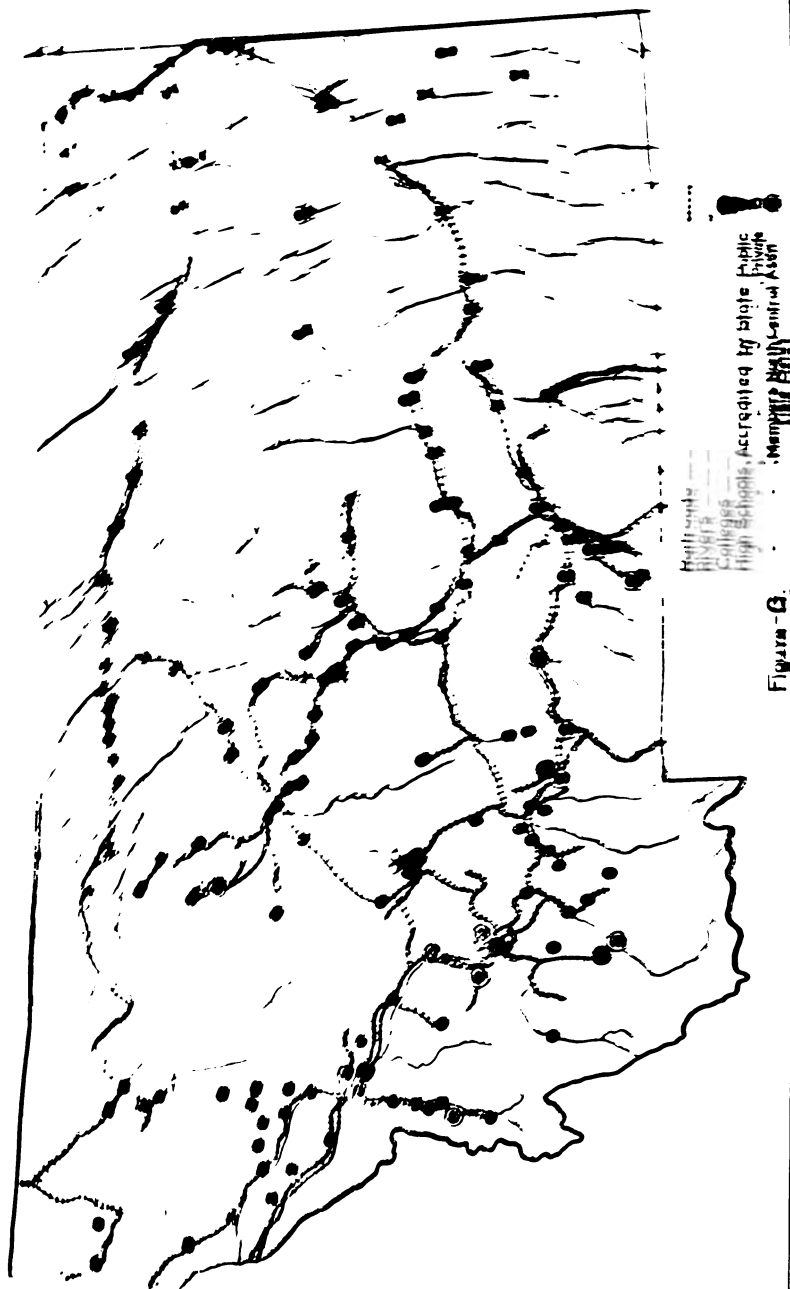
For the reasons stated in this report, the Commission reaffirms its belief that educational progress for the next few decades, in America, would be best attained by the strengthening of existing colleges rather than establishing new institutions. The Commission believes a college should endeavor to grow, in equipment, resources, and student body, to at least 400 or 500. Institutions with sufficient endowment to provide instruction to this number may, perhaps make their largest contribution by limiting their student body to a smaller number, as in the notable case of Haverford.

We believe that this growth can be obtained by

(1) Denominational co-operation in the strengthening of existing colleges, most obviously illustrated by the support the Baptists in Minnesota have decided to give to Carleton, instead of establishing their own college.

(2) In some cases at least, by co-operation with existing state institutions, whereby the state institutions will encourage larger attendance in the colleges, or will definitely aid them to become Junior Colleges, fitting for the professional school of the state Universities. (Note the University of Missouri's arrangement with the Junior Colleges of the state.) The President of a state university has tentatively suggested the allocating in the colleges the applicants for whom the university is unable to care properly. In the cases of small colleges which cannot secure the equip-

WATER RESOURCES OF THE STATE



ment and endowment and student body of an Efficient College, we believe they should definitely face the question of becoming Junior Colleges.

(3) An interesting suggestion has recently been made by Dr. J. E. Bradford, Secretary of the Board of Education of the United Presbyterian Church. He has proposed that one of the great churches of the country, in place of establishing a new college in a somewhat sparsely populated district, enter into an arrangement with the trustees of an existing college, by which they will establish a school of religion adjacent to the campus of the present college. This school would maintain chairs of Bible, Philosophy, Sociology, History, and possibly one or two more subjects. All other college work would be carried in the established college. \$25,000 a year spent in this way will do as much as a much larger sum spent in operating a new college.

(4) The Commission believes existing colleges might with propriety and in the interest of higher education co-operate in the enactment of state legislation safeguarding the issuance of charters for the conferring of academic degrees.

If the above principles are carried out, the Commission believes there will be little necessity of the establishment of new colleges. There are some parts of the country which today are not properly equipped with colleges. In most cases, movements are already under way for the establishment of collegiate institutions in these states. There may be a need for colleges of special types (such as colleges exclusively for women) in certain other sections of the country, although such the Commission believes to be very few.

Before a new college is established, the Commission believes that educational progress will be best attained if the following principles are followed:

(1) A survey of the support upon which the new college can count: population, high school students, denominational. Unfortunately, the day has not yet passed when local pride was the main motive for the establishment of

a college. The Commission believes that this survey should be made by disinterested persons, mainly concerned with educational progress, and some of them, at least, not connected with the denomination interested in establishing the new college.

(2) It should first be conclusively demonstrated that existing colleges cannot solve the problem. An institution has been called to the attention of the Commission which has a college of a similar type a mile and one-half away, another ten miles, another one eighteen miles, and yet ten years ago a fourth was established less than forty miles away. One enrolls 300; one, 200; one, 100; one, 50.

(3) New institutions should always be located on the main lines of travel, near centers of population. This does not mean that they necessarily should be located in cities; yet no new institutions should be located in the part of a new state in which the population is not increasing. While certain long-established institutions violate this principle of accessibility, Dartmouth being the best example, it should not be considered for any newly established colleges.

The Commission is grateful for the opportunity of study of a subject of such great interest and importance, and trusts that its work may prove of some service in strengthening American Colleges.

(SIGNED) JOHN M. THOMAS
R. M. HUGHES
JAMES L. MCCONAUGHY

GENERAL PRINCIPLES FOR DETERMINING THE FIELD AND CONSTITUENCY OF AN EFFICIENT COLLEGE

DR. KELLY

A serious attempt is made here to bring together in small compass and state succinctly certain tests which may be used in determining whether a college now has or is likely to have a field and constituency. Some practical application has already been made of these tests and they have been found surprisingly useful.

One of the Church Boards of Education called on the office of the Association and the Council to make a statistical study of the States of Washington, Oregon and Idaho with a view of making recommendations as to the proposed establishment of a new college at some point in that territory. In Montana there is one small denominational college and a technical secondary school affiliated with a denomination and a study has been made of that state with the hope that combinations may be made which will prevent the suicidal multiplication of institutions without adequate resources. In North Dakota a similar study has been made in view of the fact that Fargo College has offered to amend its charter so that an equal representation of several denominations may be possible in the management of the institution. These tests have been applied in similar investigations in South Dakota, Wisconsin, Michigan, Iowa, Missouri, Kansas, Oklahoma, Colorado, Georgia and Florida. It is the intention later to publish some of these state reports.

It is quite certain there are a number of "constants" in this problem and while it is recognized that there are many variables, it is thought worth while to attempt to define some of the constants.

Confessedly the estimates suggested are general, they deal much with averages, they are largely statistical and they do not undertake to measure the spirit or atmosphere of a college.

The discussion is carried on with the "Efficient College" particularly in mind as defined by the Association of American Colleges. This has the advantage of definiteness and the further advantage of holding up for consideration an ideal which has been generally agreed upon as educationally sound. The discussion does not assume that a college which is not "efficient" in accordance with the terms of the definition is failing to do its present task or is unworthy of consideration and support. A large majority, no doubt of the colleges holding membership in this Association are unable to meet the requirements set forth in the Association's definition. But this fact has not prevented these colleges from attaching significance and value to the definition. It is fair to assume that most colleges aspire to reach the "efficient" class or, at least, would like to measure their own resources and attainments in terms of the Efficient College. For those colleges which profess or aspire to be "Minimum Colleges" as defined by the Association, it will be easy to make the necessary adaptations of the principles. In other words, the principles may be applied to the "minimum" college quite as successfully as to the "efficient" college.

1. TOTAL POPULATION

As set forth by the chairman of the Commission, there is on the average one student enrolled in some type of college out of each 212 of the population of the United States. This counts all types of colleges, including normal schools of college rank. It estimates that of our total population of 106 million, approximately five hundred thousand students are doing work of college grade. A good many tests have already been made which indicate that the average is not far from correct. One in 213 of the population of Ohio is in college. In some of the cities of the country the number of students in college is in the ratio of 1 to 150 or 145. On the average therefore, an "efficient" college should draw from a total constituency of approximately one hundred thousand persons. A "minimum" college should be able to count 20,000 persons.

It is further estimated that about six per cent of the men and women of college age are in college and if the Army Intelligence Test of native capacity may serve as a guide, there is not much probability that more than fifteen per cent of the men and women of college age will enter college. While this is a prognostication, it nevertheless appears to be a fairly safe conclusion that the number of college students is not likely to much more than double within the next generation. If therefore there were a perfect distribution of college students among existing colleges, which, of course, there cannot be, it would appear that there is no great need for the establishment of large numbers of new colleges. The present agencies, if they could be made to function, would be able to take care of a surprisingly large part of the increasing supply of college students. To say the least, the burden of responsibility is on the founders of a new college. They ought to satisfy themselves and the public as well, that there is a place for the proposed institution in the field of American education.

2. RACIAL AND VOCATIONAL FACTORS IN POPULATION

A careful study must be made of the racial and vocational characteristics of the general population. The population of many of our cities and states is so cosmopolitan that these considerations become in certain instances quite dominating. There are certain racial groups whose representatives do not look toward higher education. There are other racial groups which are noted for their interest in such education. It is also probably unfortunately true that the college as yet has not made an appeal to the representatives of certain vocational classes. So long as the offerings of the typical college are essentially unchanged, it will be quite fair to predict that representatives of certain lines of business will not be flocking toward college doors. It is unnecessary to particularize in stating the general principle, but when the principle is applied to a specific case, It is unnecessary to particularize in stating the general principle before one-half of the general population which is claimed as making up the constituency of a given institution is

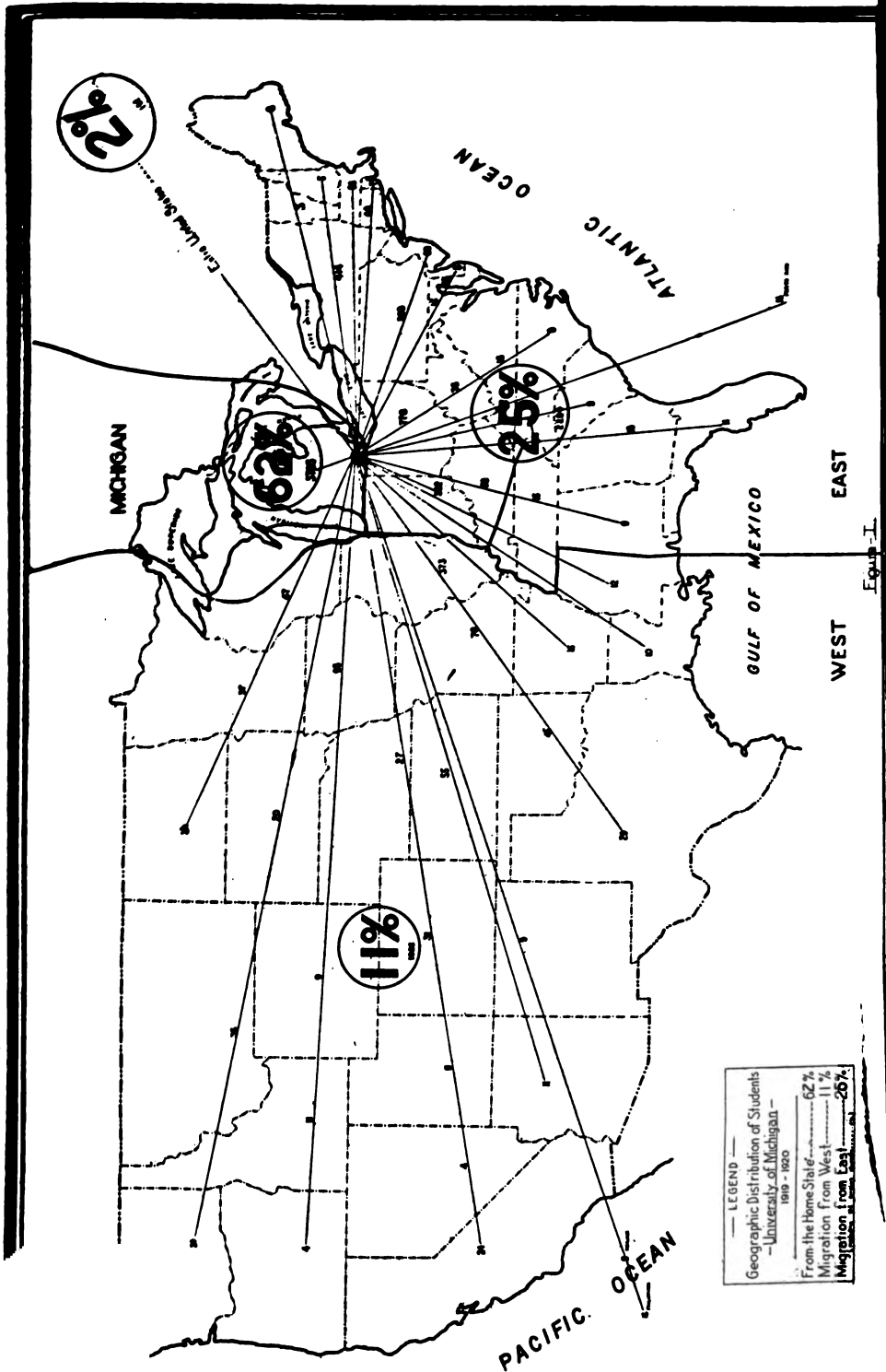


Figure I

found to be made up of racial and vocational groups not particularly interested in college work the fact must be recognized. Such a college will need a general constituency of two hundred thousand. This principle also raises the question as to the policy of a given institution in offering short, correspondence and extension courses, etc., for those parts of the population not interested in the regular college course.

3. CHURCH POPULATION

It is a fact now well demonstrated that most of the students in American colleges are affiliated with churches. In general terms, college students are not recruited in relatively large numbers from those parts of the population which claim no church affiliation. It may be estimated that of the total college population of the country from sixty to eighty per cent of the students come from the homes of church members. The proportion varies in different institutions and no one has the means absolutely of determining the exact ratio as applied to all the college students of the country but there is a mass of data which supports the general statement here made. President Burton is authority for the statement that 85 per cent of the total enrollment of the University of Michigan claim church affiliation. In the report of the church census which has recently been taken under the general supervision of Professor Soares, of the students in the University of Chicago, it is asserted that approximately 90 per cent of the students in that institution claim such affiliation. A statement issued and signed by the registrar of Pennsylvania State College sets forth that within a fraction of 95 per cent of the students in that institution express church preference and affiliation. Ninety per cent of the cadets in the United States Military Academy at West Point claim church affiliation, the leading denominations being Episcopal, Methodist, Catholic, Presbyterian. Dean Bouton of New York University states that of the undergraduate students who entered that institution in September, 1920, there were 28.8 per cent of Jewish faith, 31.8 per cent Roman Catholic and

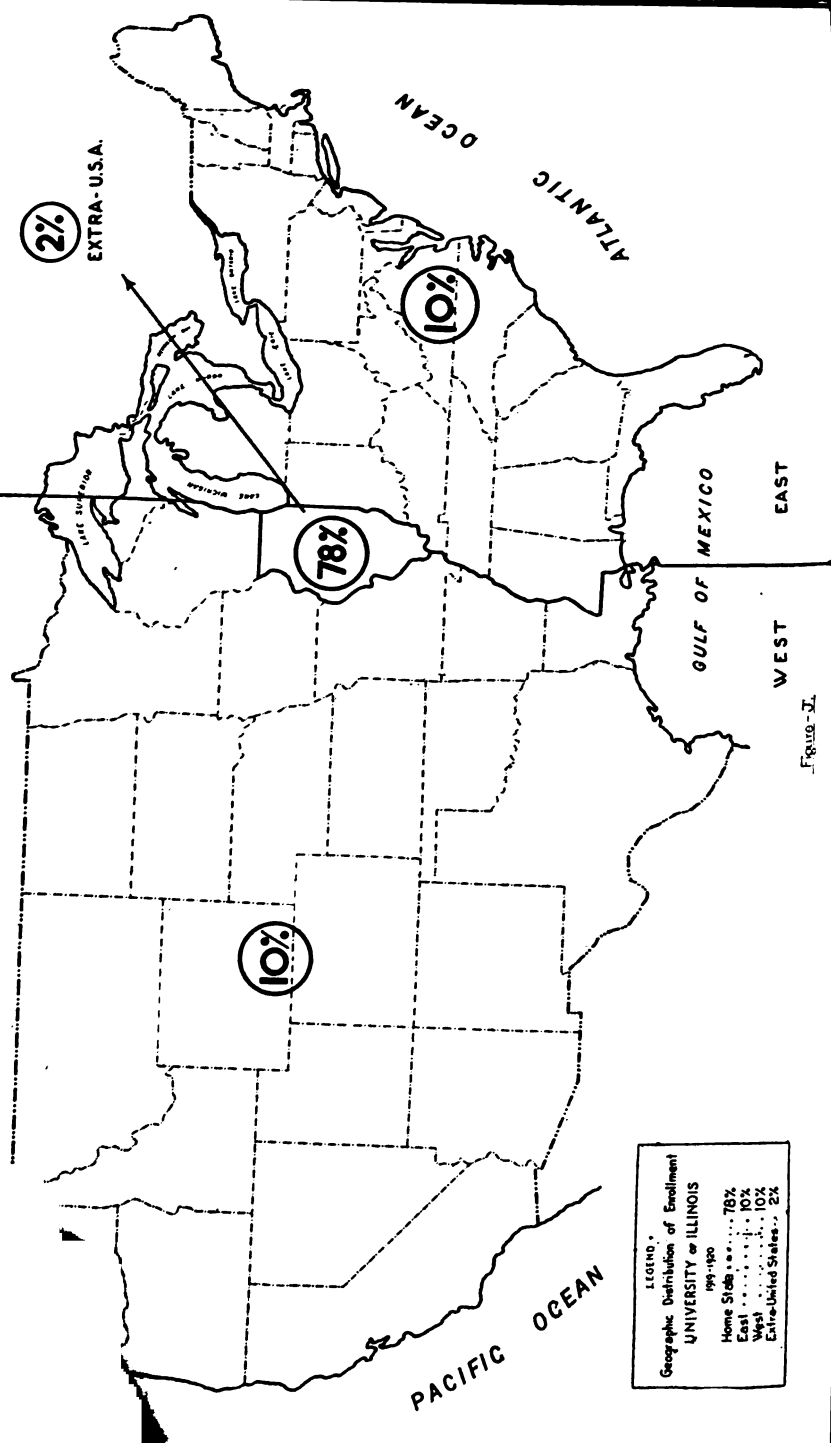


Figure 2

39.4 per cent Protestant, and he believes that these proportions apply approximately to the entire student body at University Heights. Of course, it is well known that in many of the denominational colleges of the country nearly all of the students are members of or are affiliated with churches. The mere fact therefore that a college has one hundred thousand constituency to draw from would lose much of its significance unless it could be shown that a very considerable proportion of that population was connected with the churches. The smaller the ratio of church population, the larger the total population required.

4. HIGH SCHOOL POPULATION

While, as has been shown, the total population and the racial, vocational and church elements of that population are important factors in determining college attendance, neither, nor all together, constitute the most immediate factor. Students who go to college must have been in secondary schools. The college therefore must either have a full quota of secondary students to draw from or must have such in reasonable prospect if it is to even predict increase in attendance. The U. S. Bureau of Education recently issued two comprehensive bulletins giving quite complete statistics of public and private high schools for the year 1917-18.* From these bulletins and from other available sources many interesting facts and tendencies may be pretty accurately determined for almost any state or section of the country. Not only is it desirable to know what the total number of high school students is within the territory of the college, but as well, the proportion of those who graduate who go to college and the trends of development of secondary schools and their students. The number of public high school graduates entering college varies all the way from 48 per cent in Texas to 18 per cent in Maine. Of private high school graduates a larger proportion go to college than of public high school graduates. More boy graduates go to college than girl graduates from both

*Bulletin, 1920, No. 19; Bulletin, 1920, No. 3.

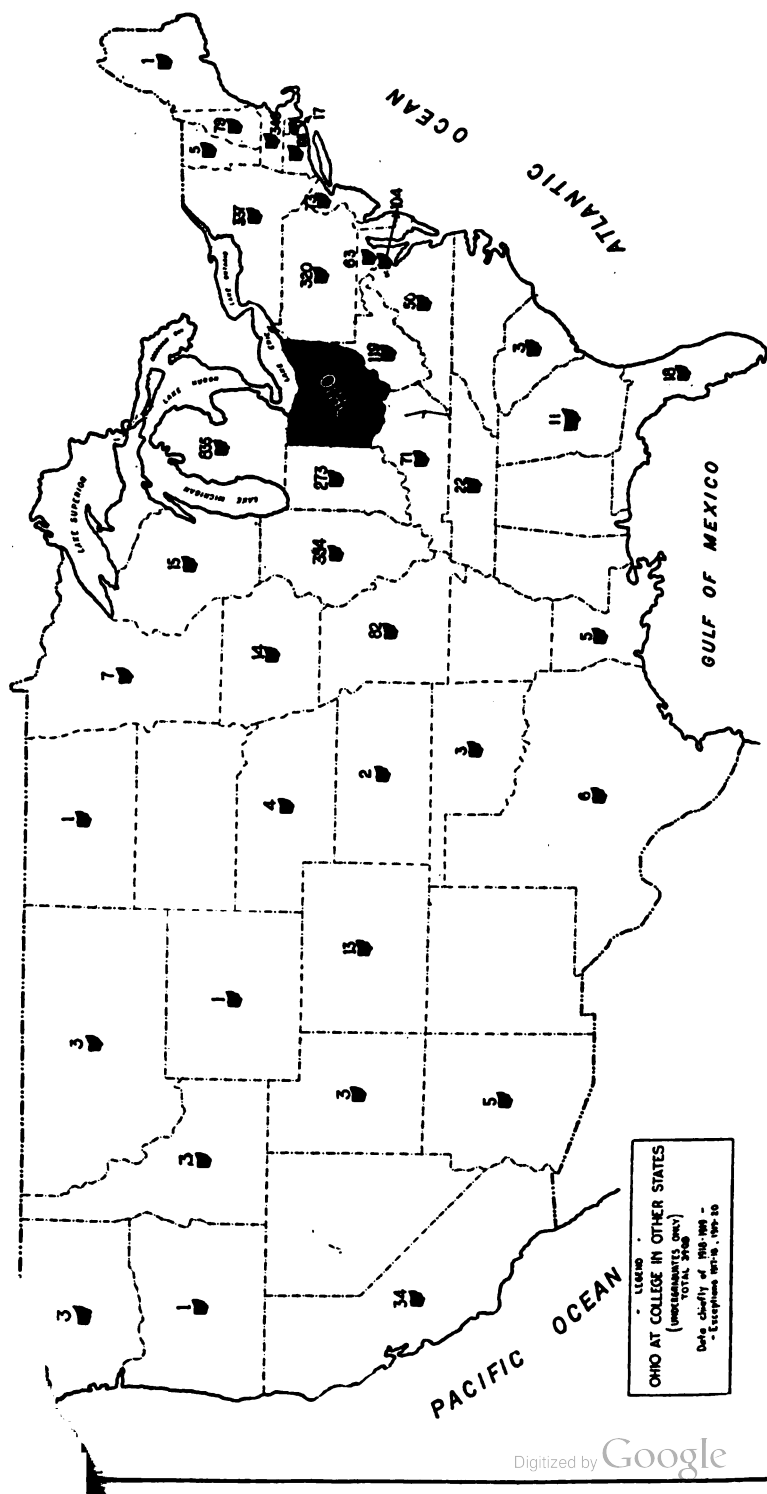


Figure-K.

public and private secondary schools. The increase in number of high school graduates during the period from 1890 to 1918 has been over 925 per cent. Since 1890 the total high school enrollment has increased 710 per cent while the total population has increased only 68 per cent. Even with a million six hundred and forty-five thousand one hundred and seventy-one children in the high schools only a very small fraction of the entire population is so enrolled. This proportion has increased almost five times within the last thirty years. California and Kansas lead in this particular.

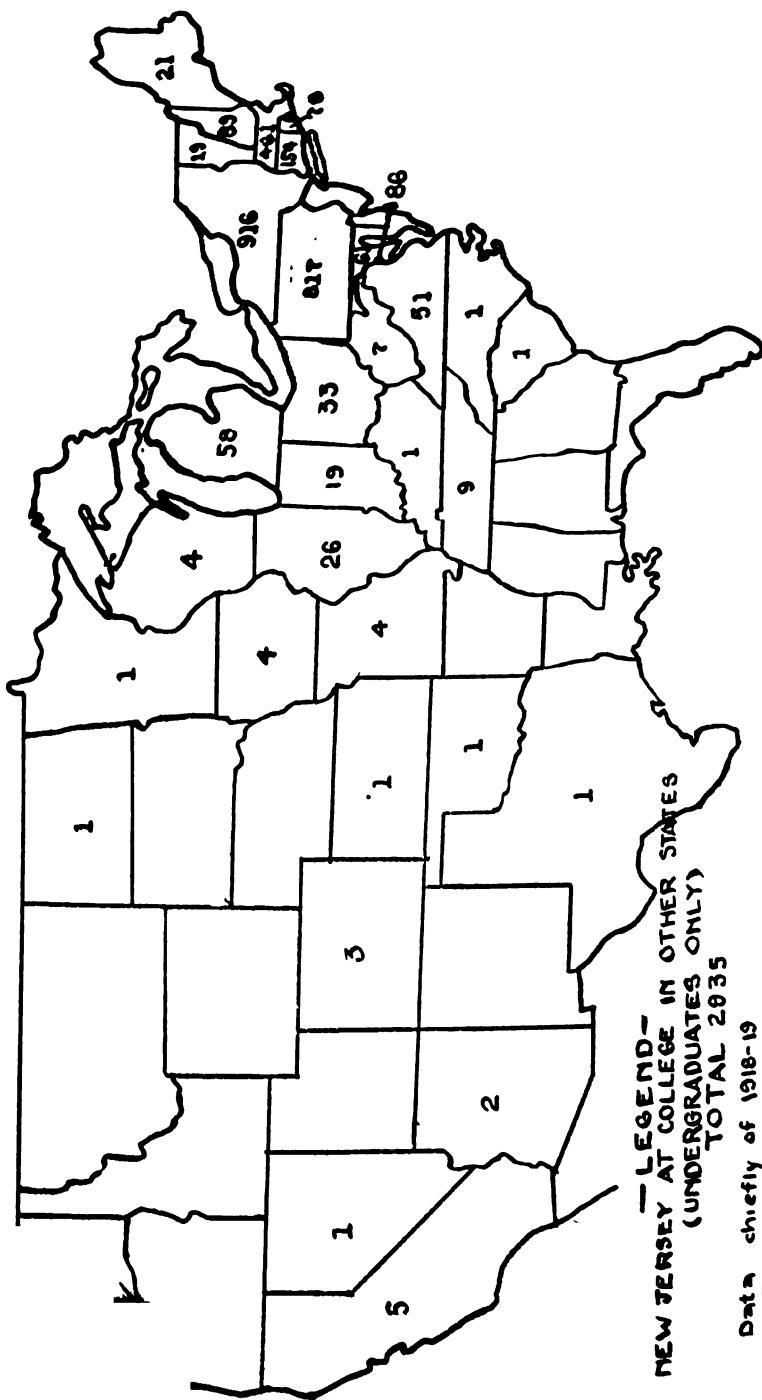
5. LOCAL POPULATION

In the typical college, particularly the college which does not already have prestige, approximately 50 per cent of the students come from within fifty miles. If a given college represented the ideal average, it would have one hundred thousand general population, of which sixty to eighty thousand would be church population, mostly Protestant, and a population of fifty thousand within the fifty mile radius. Check up also on racial, vocational and high school phases of the population. The above figures are not to be given exact mathematical value but are suggested as reasonable guides in making studies.

Of course, certain old and well established institutions violate this principle of local population and draw a majority of their students from a territory beyond fifty miles and in some instances a large number of their students from a territory beyond one hundred miles. But these facts do not militate against the general principle for the typical college without prestige. It is also to be noted that in certain sections of the country, particularly certain western states, the fifty mile radius must necessarily be increased to one hundred or even one hundred and fifty miles. The approximate facts concerning any institution can be made available on all these points.

6. CENTERS OF POPULATION

Significant shifts of population are occurring in several states of the Union. In Montana the centre of population



—LEGEND—
 NEW JERSEY AT COLLEGE IN OTHER STATES
 (UNDERGRADUATES ONLY)
 TOTAL 2835

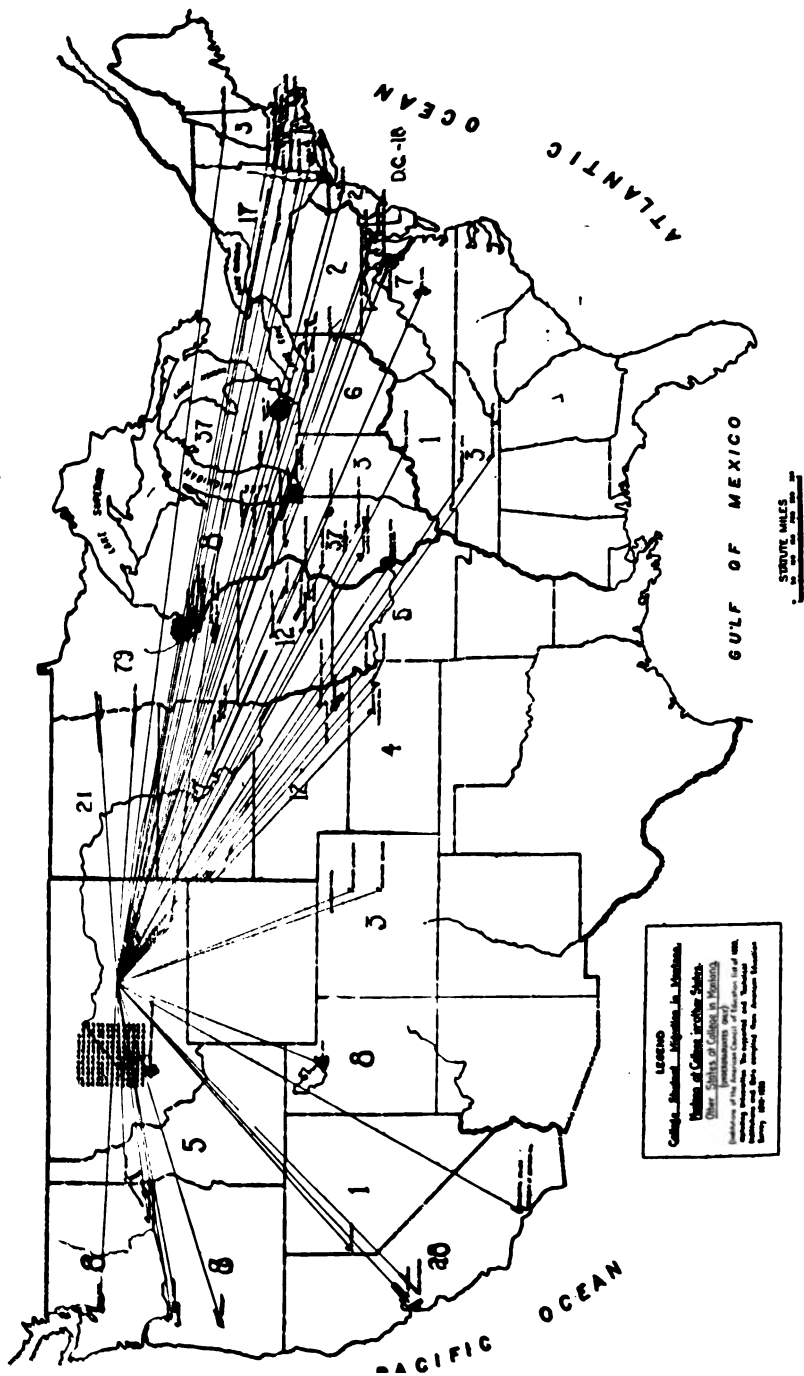
Data chiefly of 1918-19
 — Exceptions 1919-20

is moving eastward while in the adjoining state of North Dakota it is moving westward. These movements of population are due to ascertainable causes and will undoubtedly affect the development of colleges. The movement of the centre of population may be away from interests of temporary value and in the direction of stable development. In one state studied eight movements of population have been pointed out, that is, the movement of Indians, Hunters and Trappers, Prospectors, Pioneers, Stockmen, Lumbermen, Miners and Farmers. The significance of these movements of population is seen in the history of colleges founded in response to sectarianism, as aids to real estate booms, etc. The question is, how much and what elements of stability does a given community have and what are the prospects for the future so far as population is concerned.

7. MIGRATION

The October issue of the Association of American Colleges Bulletin contains a report of a study made in this office of the Migration of those college students who are enrolled in the colleges listed by one or more of the following standardizing agencies:* the Association of American Universities, the North Central Association of Colleges and Secondary Schools, the Southern Association of Colleges and Secondary Schools, and the University of California. The report referred to covers only the colleges in the above named list and eliminates for obvious reasons the large independent and state universities. The striking fact is brought out in this investigation that on the average, 30 per cent of all of the college students of the United States, as defined above, attend college in some other than their own state. The facts are available with reference to the number of students entering and the number leaving each state for institutions on the list. One state draws almost 90 per cent of its college students from other states. Another state holds about 94 per cent of its college students.

*List published by the American Council on Education, Washington, D. C.



Not only the numbers, but the directions of migration may be determined for each state. It is evident that more and more migration will be an important factor in determining the field and constituency of a college.

*Figure I. Contrary to the usually accepted opinion streams of student migration flow westward as well as eastward. The University of Michigan gets but 11% of its students west of its own state line. Twenty-five per cent come from the West (including Indiana and Kentucky.) The total university attendance is counted including the summer session.

*Figure J. This is a companion map to Figure I. Manifestly the great universities west of Michigan absorb many students before they reach Ann Arbor. There is a fine balance at the University of Illinois in the matter of migration eastward and westward. The total university attendance is counted including the summer session.

*Figure K. Ohio sends students to almost every state of the Union and keeps a liberal supply in her own fifty colleges. College education is contagious.

*Figure L. New Jersey is prodigal of her youth. Almost three thousand of them are accounted for on this map. Besides there were no fewer than 2,924 New Jersey college students in Princeton (295), Rutgers (381), Stevens Institute (281), St. Elizabeth (387), New Jersey College for Women (49), Upsala College (1), and the three state normal schools.

*Figure M. Montana sends large numbers of her young people to the Eastern and North Central states, a few to the South and the West. Her own institutions are beginning to attract students from outside the state. Data concerning one state institution is missing.

*NOTE: College students only are reported. There are about fifteen institutions belonging to the American Council list—mostly technical or Roman Catholic, and usually with small enrollment—concerning which we have no information.

8. TRANSPORTATION

There has been a striking parallel between the development of our higher education and our railroad systems although certain ones of the leading colleges of the United States were established consciously in defiance of this general principle. It is certainly true that the era for establishing colleges away from transportation lines has passed if it ever existed. Maps will be shown in this report showing the distribution of leading colleges and high schools on railroad lines and at railroad junctions. In a word, the typical college must be accessible and the prosperity of a given institution may be greatly interfered with by its inaccessibility.

9. THE STATUS OF EDUCATIONAL DEVELOPMENT

A college is dependent in large measure upon the degree of educational development within its field. Unusual backwardness in educational development may neutralize many of the points heretofore mentioned. In some cases there is a fairly successful degree of coordination as between the various state institutions of a given state. In practically no case has such coordination been developed among the institutions belonging to the independent and denominational group. A low stage of development in elementary and secondary education curtails very naturally the potential supply of college students. The field and constituency of each institution must be studied from the standpoint of the status of development in all phases of education.

10. RESOURCES OF EXISTING INSTITUTIONS

These are available for most of the institutions of the country and are a determining factor in the establishment of a new college or in the development of a struggling college. These resources must be studied from many points of view, and have to do with personal and material considerations, such as educational standards, the scholarship of the faculty, academic recognition, the method of control, the character and extent of the curriculum, the methods of

advertising, the value of the plant and equipment and the amount of productive endowment.

The office of the Association and the Council of Church Boards of Education has already responded to numerous requests from Boards of Education and individual institutions for estimates as to the field and constituency of colleges as measured by these and other tests and possesses a large mass of data throwing light upon such problems in every state of the Union.

BULLETIN

Vol. VII

December, 1921

No. 5

Program of the Eighth Annual Meeting Studies in College Curricula

Edited by

Robert L. Kelly

Executive Secretary of the Association

Published by

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ASSOCIATION OF AMERICAN COLLEGES

Eighth Annual Meeting
Auditorium Hotel, Chicago.

PROGRAM

THURSDAY, January 12th, 6:30 P. M.

***College Objectives and Ideals**

President Clark W. Chamberlain, Denison University.
Chancellor James H. Kirkland, Vanderbilt University.
President Ellen F. Pendleton, Wellesley College.

The Announcement of Committees

FRIDAY, 9:30 A. M.

The Reception of New Members

The Report of the Association Commission on the Organization of the College Curriculum

Dr. Robert L. Kelly.
President Frederick C. Ferry.
General Discussion.

The University and the American Worker

Spencer Miller, Jr., Secretary, Workers' Education
Bureau of America.

The Report of the Association Treasurer

FRIDAY, 2:15 P.M.

The Report of the Association Commission on Academic Freedom and Academic Tenure

Dean Charles N. Cole, Oberlin College.
General Discussion.

*NOTE—Members and their friends who attend this session
will send \$2.00 each to the manager of the Auditorium Hotel for
a reservation at the dinner.

Report of the Association Commission on Sabbatical Leave

Dean O. E. Randall, Brown University.
General Discussion.

The Congregational Foundation for Education

President Donald J. Cowling, Carleton College.

FRIDAY, 7:45' P. M.

Education for Symmetry

President Arthur E. Morgan, Antioch College.

Report of the Association Commission on Faculty and Student Scholarship

President Frederick C. Ferry.
General Discussion.

Report of the Association Commission on Architecture

President Raymond C. Hughes, Miami University.
Discussion.

SATURDAY, 9:00 A. M.

Report of the Association Commission on the Distribution of Colleges

Dr. Robert L. Kelly.
Dr. George F. Zook, The United States Bureau of Education.
Discussion.

Professorial Salaries

United States Commissioner, John J. Tigert.

Limiting the Number of Students

Dean Howard McClenahan, Princeton University.

STUDIES IN THE CURRICULA

Curriculum charts for thirty-eight institutions are presented in this issue of the Bulletin. They have been constructed in the office of the Association. They are to be considered essentially as work sheets. It is hoped the members of the Association may be able to give them some study before the annual meeting in Chicago.

This method of study is a continuation of that set forth at the 1921 annual meeting in New York. The charts in this issue of the Bulletin should be compared with those printed in the March 1921 issue, which had to do with a group of Congregational Colleges.

In each chart the purpose is to show but four general facts with reference to the curriculum. These are (1) the number of semester hours advertised in the catalogue for each department, for the year 1920-21 unless otherwise noted, (2) the names of the departments in which at least twenty-four semester hours of work were advertised for that year, (3) the number of semester hours actually taught in each department during that year, and (4) the earning power of the departments as determined by academic credit and student enrollment. The limitation of the page-size prevents in some cases the exact reproduction of the scale of construction. The scale is exactly comparable on the original charts which will be exhibited at the time of the annual meeting. At the annual meeting some effort will be made to interpret the facts presented.

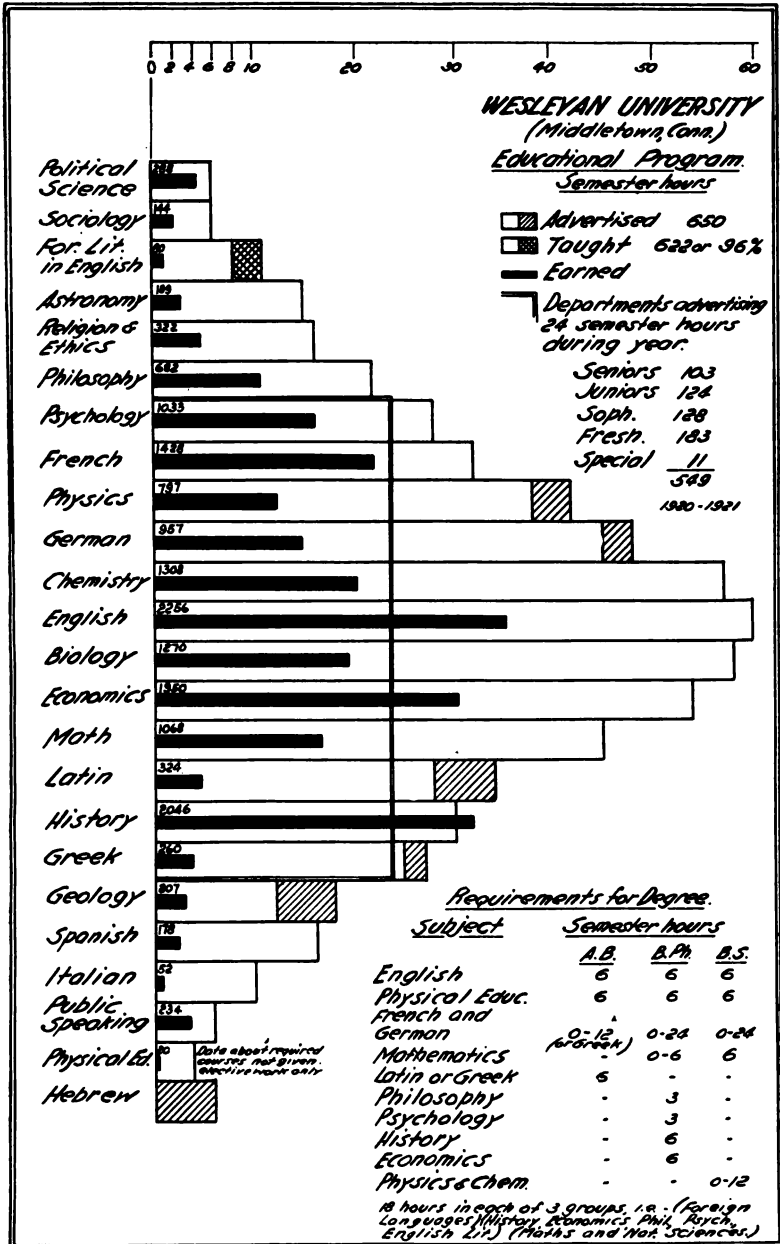
The formula for the construction of these charts was given in the March issue. The details as set forth there have been followed without deviation. A general formula was used in order that the charts might be comparable. In some cases a common unit of measure was arbitrarily taken. For instance, it was found that the amount of credit given per year for beginning language varied from zero to ten semester hours. Six semester hours was taken as the common measure and the computations made accordingly. Sometimes an alternative credit is included in the

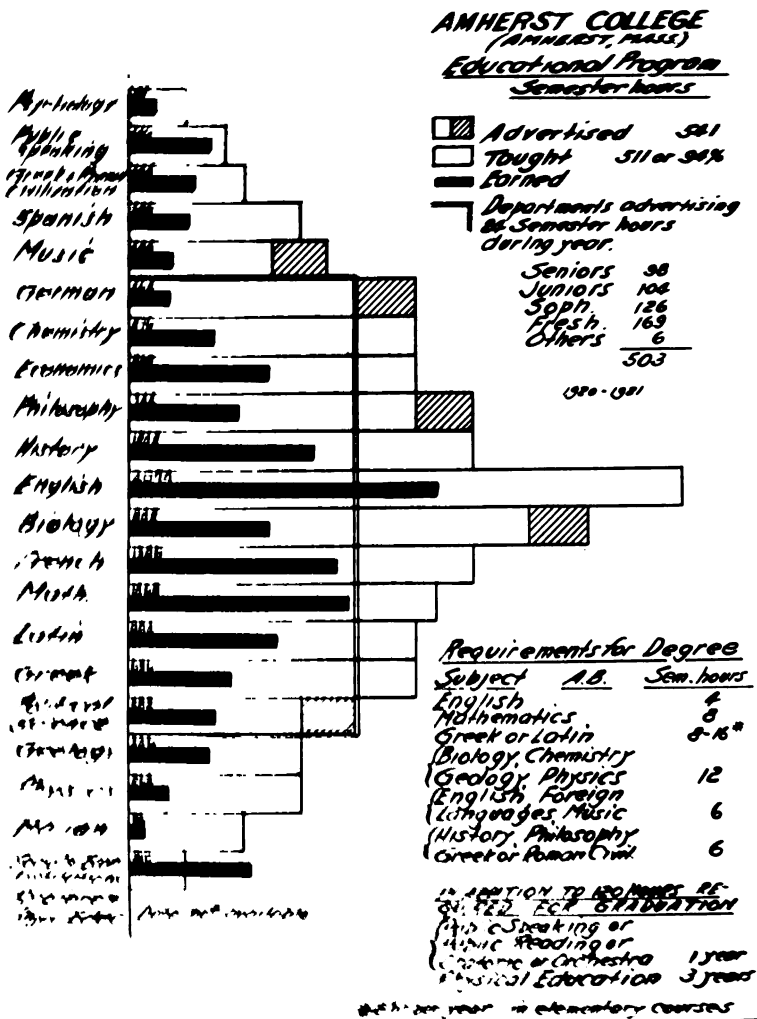
catalogue for a given course. In such cases the smaller option has always been taken by our tabulators.

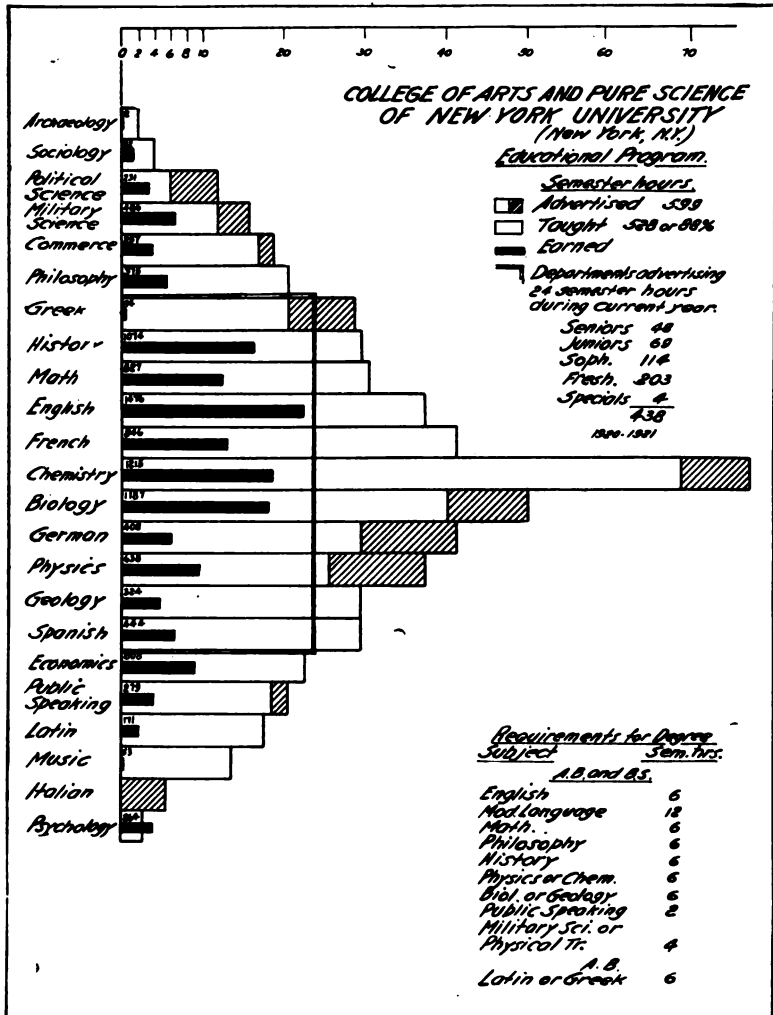
No photograph does the subject exact justice; particularly a photograph of a cross section. But the officials of the institutions whose charts are presented here have approved them as doing approximate justice within the field which they undertake to cover, and as furnishing some fundamental data for a study of curriculum organization. The hearty co-operation of these institutions has been greatly appreciated; without it the charts could not have been constructed. Many other institutions have co-operated, and some additional charts may be published later. In some cases the college officials have preferred to withhold the publication for the present.

The colleges are presented in the following order: Men's colleges, women's colleges, junior colleges, co-educational colleges—among which are the colleges of some independent and state universities.

Error: In the chart of Phillips University, diagonal lines should be omitted from the representation of the department of Psychology.







MAJORING IN A.B. or B.S. DEGREE

Requirements for
European Program

Requirements

1. American 15
2. Foreign 25
3. Total 40

Requirements for

European Program

During Study

Senior 15

Junior 5

Soph. 12

Fresh. 8

Total 40

See 40

Latin

German

French

Spanish

Portuguese

Italian

Arabic

Hebrew

Chinese

Japanese

English

French

German

Italian

Math

Science

History

Philosophy

Religion

Physical

Chemistry

Medicine

Law

Spanish

Portuguese

Italian

Hebrew

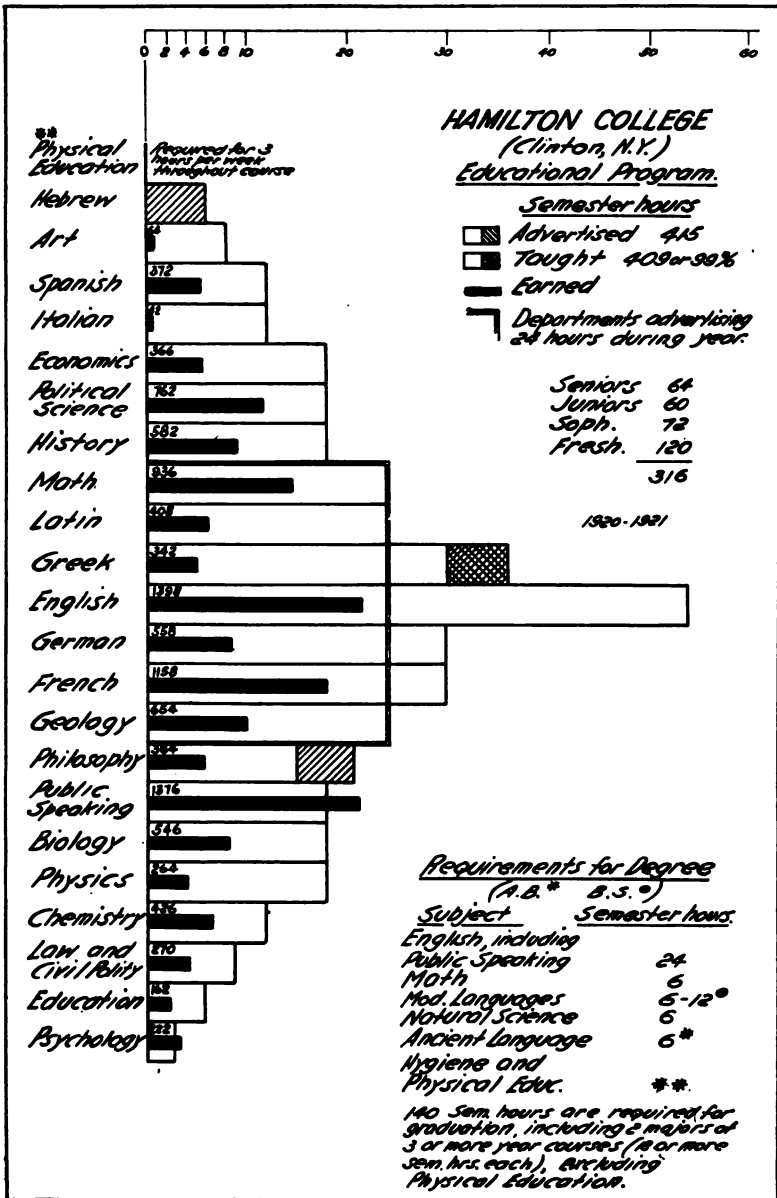
Chinese

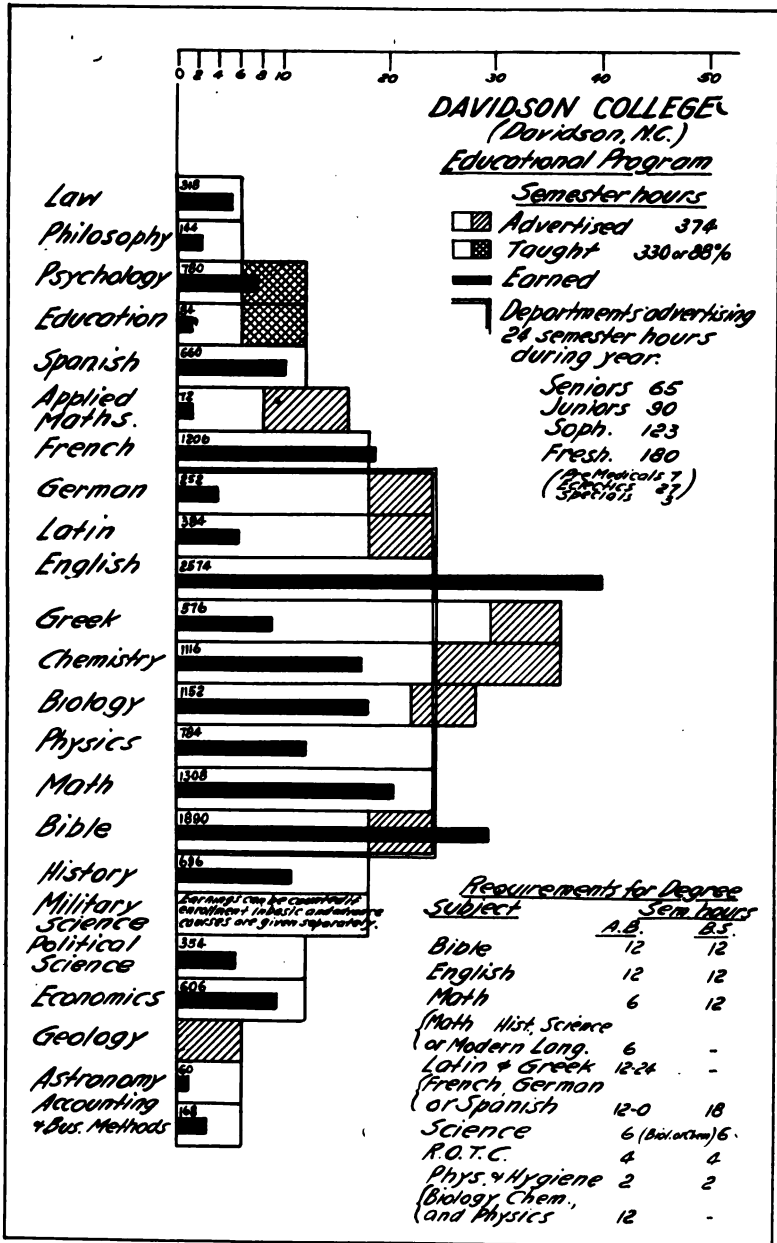
Japanese

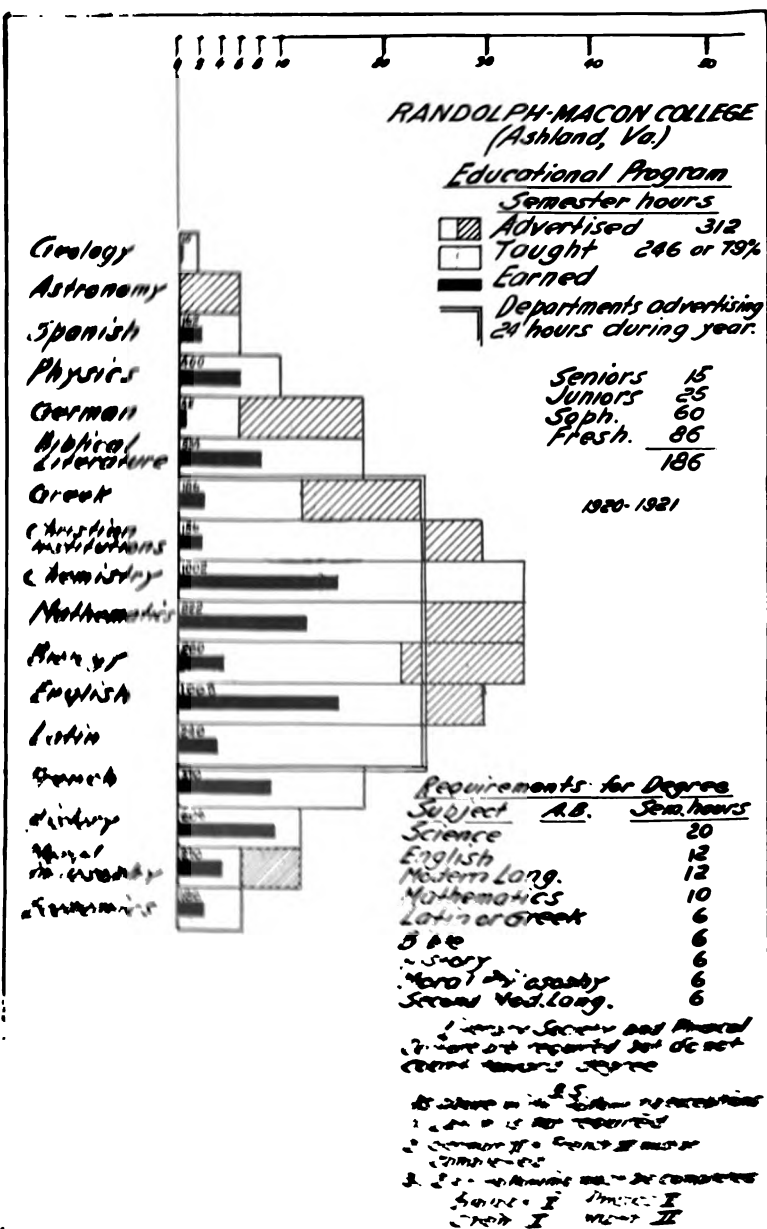
Requirements for Degree

A.B. or B.S.

Subject	Sem. hrs.
Bible	3
Rhetoric	4
Math	8
Latin	6-12
Mod Language	6 or more
Chemistry,	
Biology or	
Physics	2 courses







E

7

E

1/6

80%

wing

see

hours

22 *

8 *

6

27

6

10

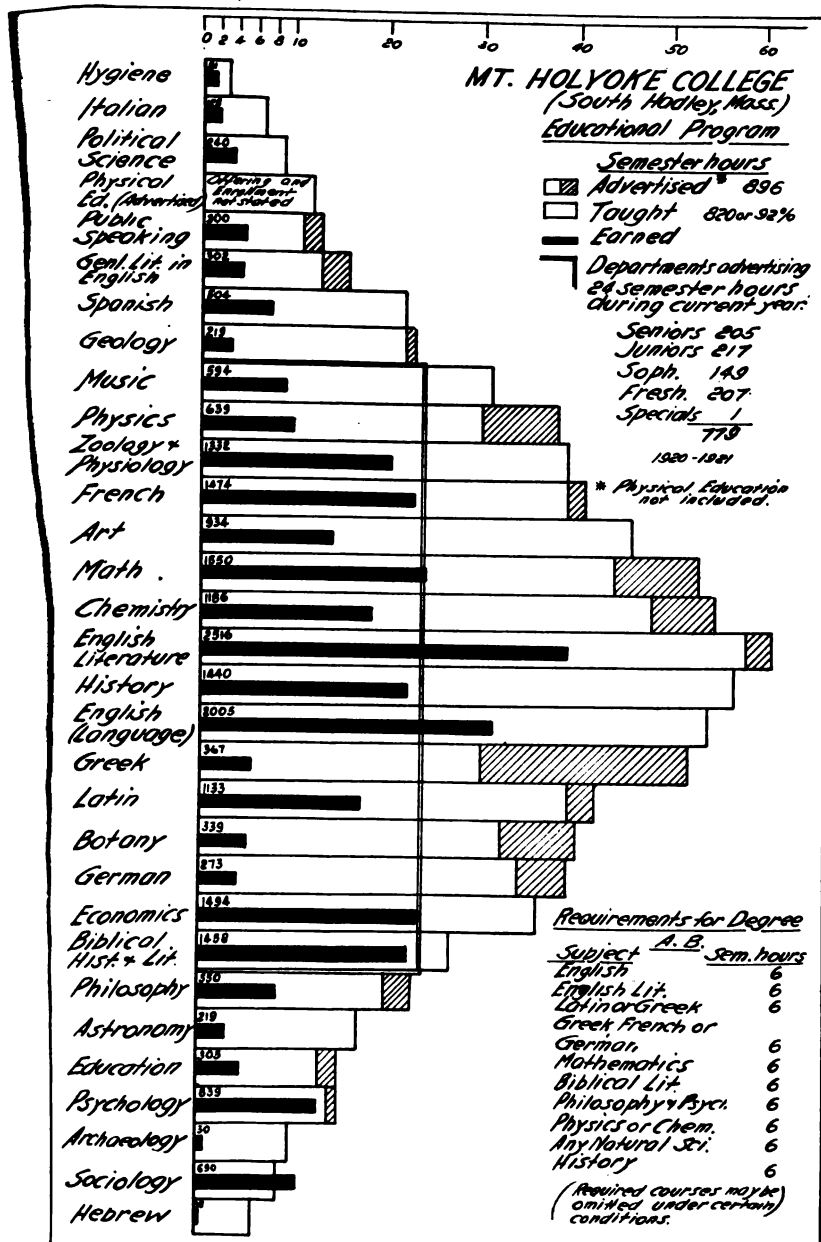
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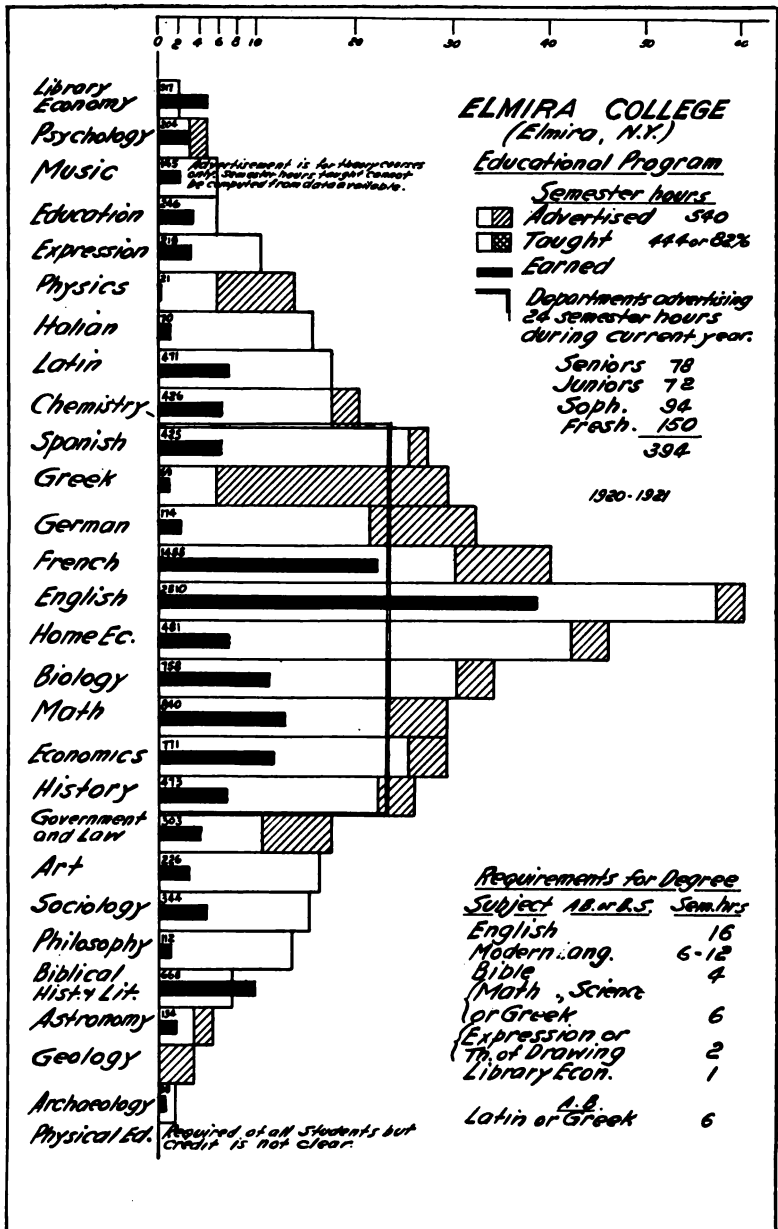
18

4 *

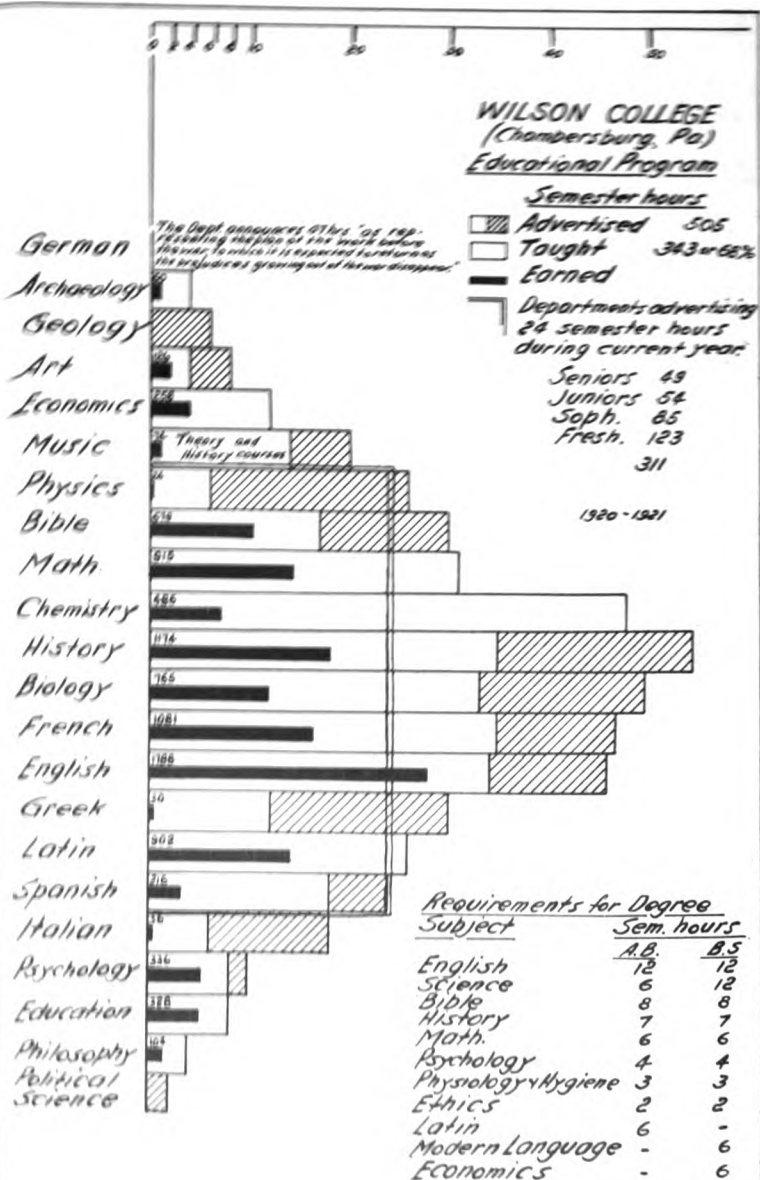
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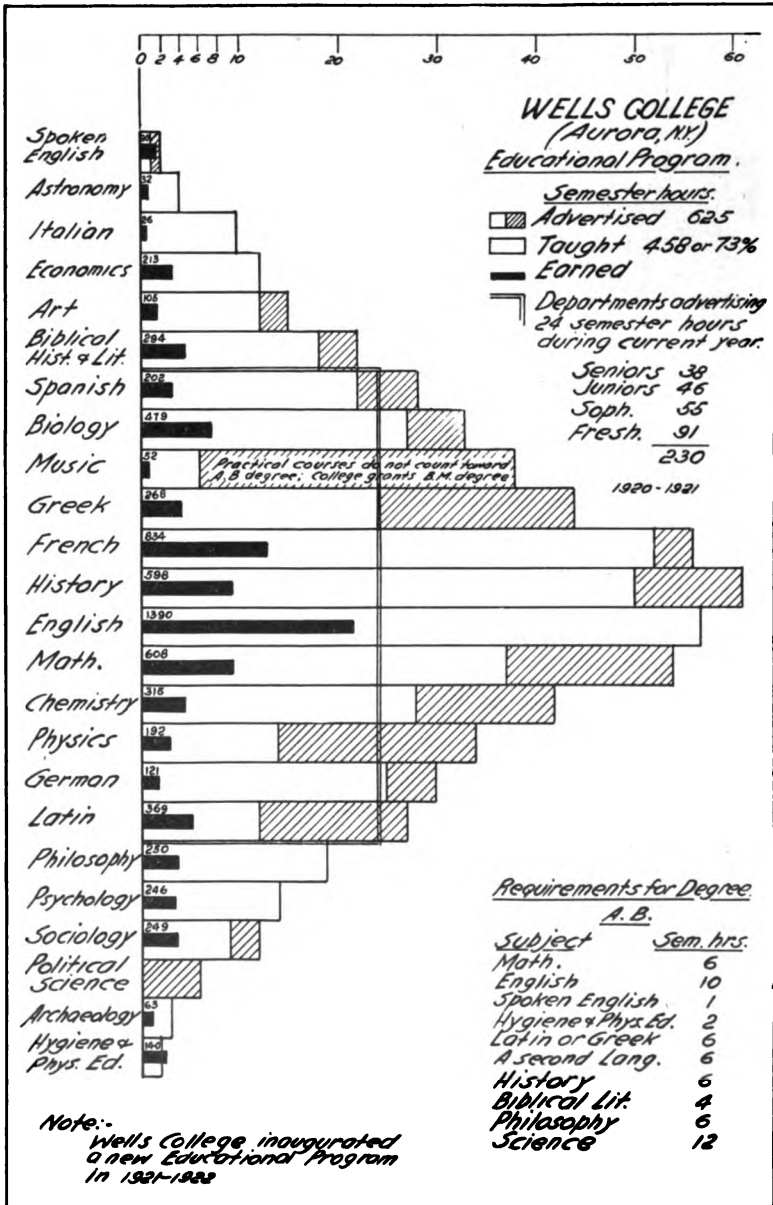


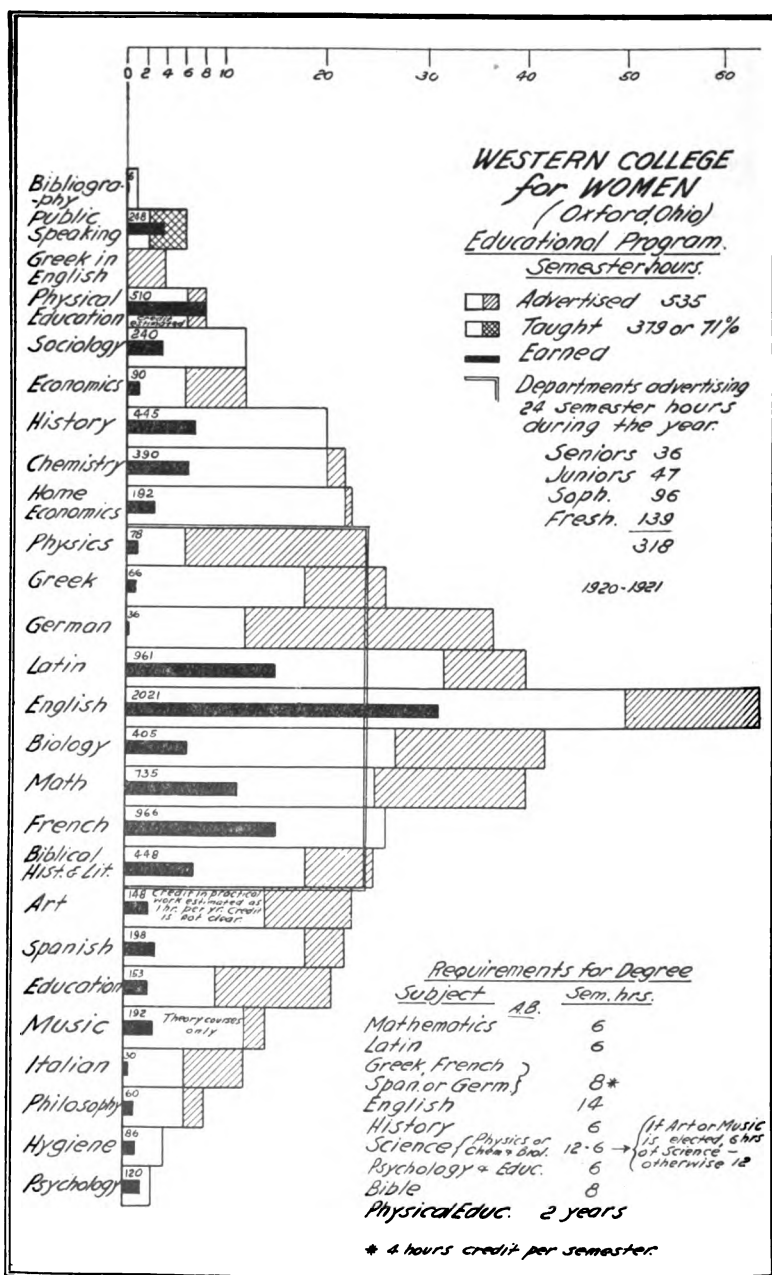


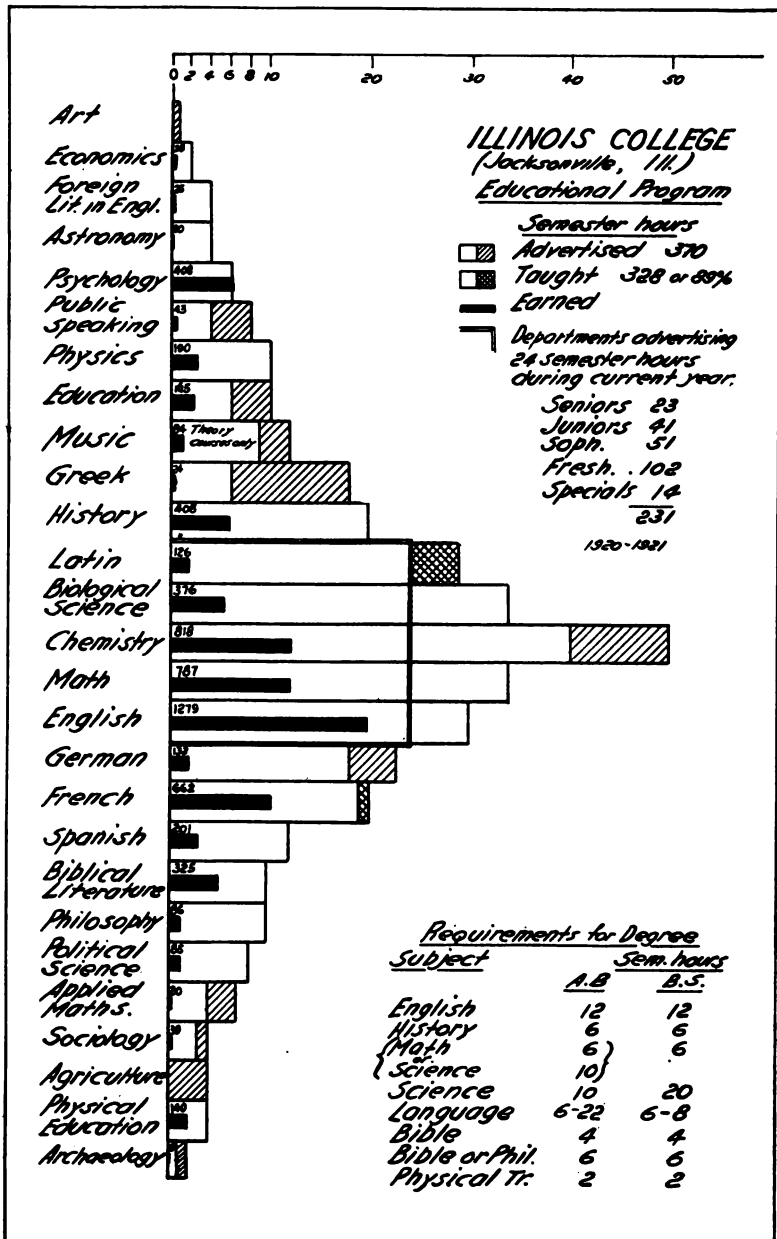


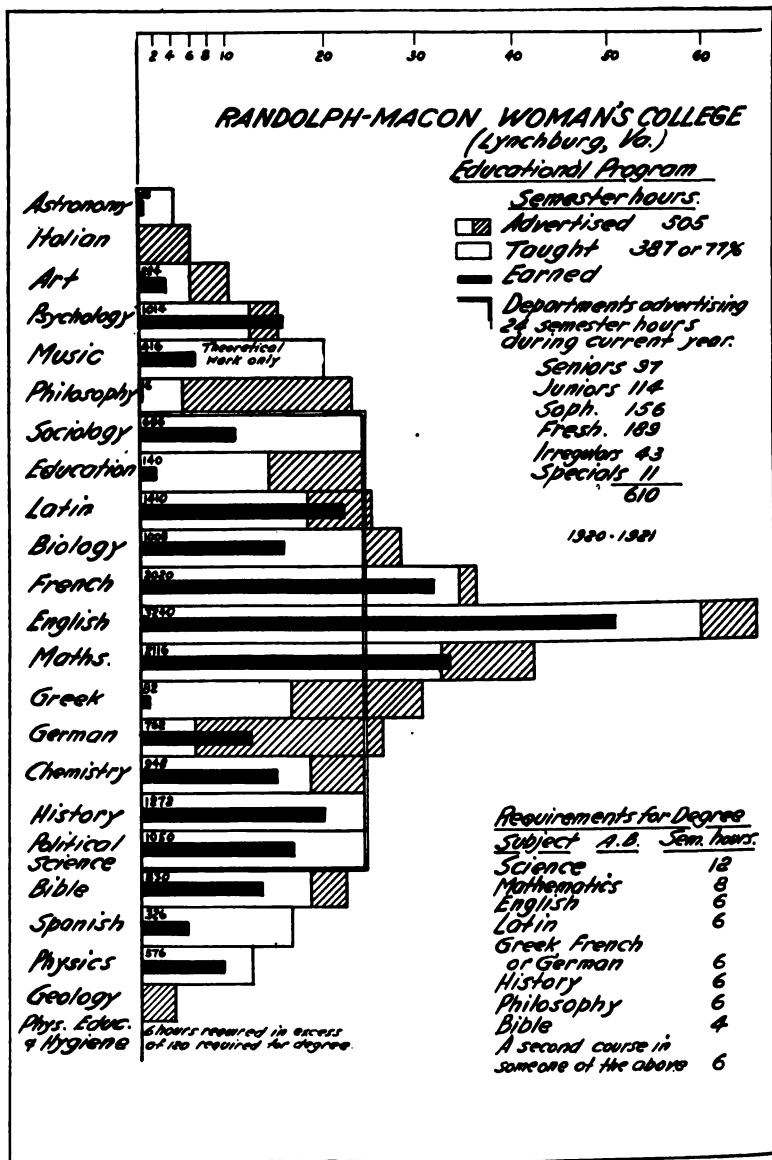
ASSOCIATION OF

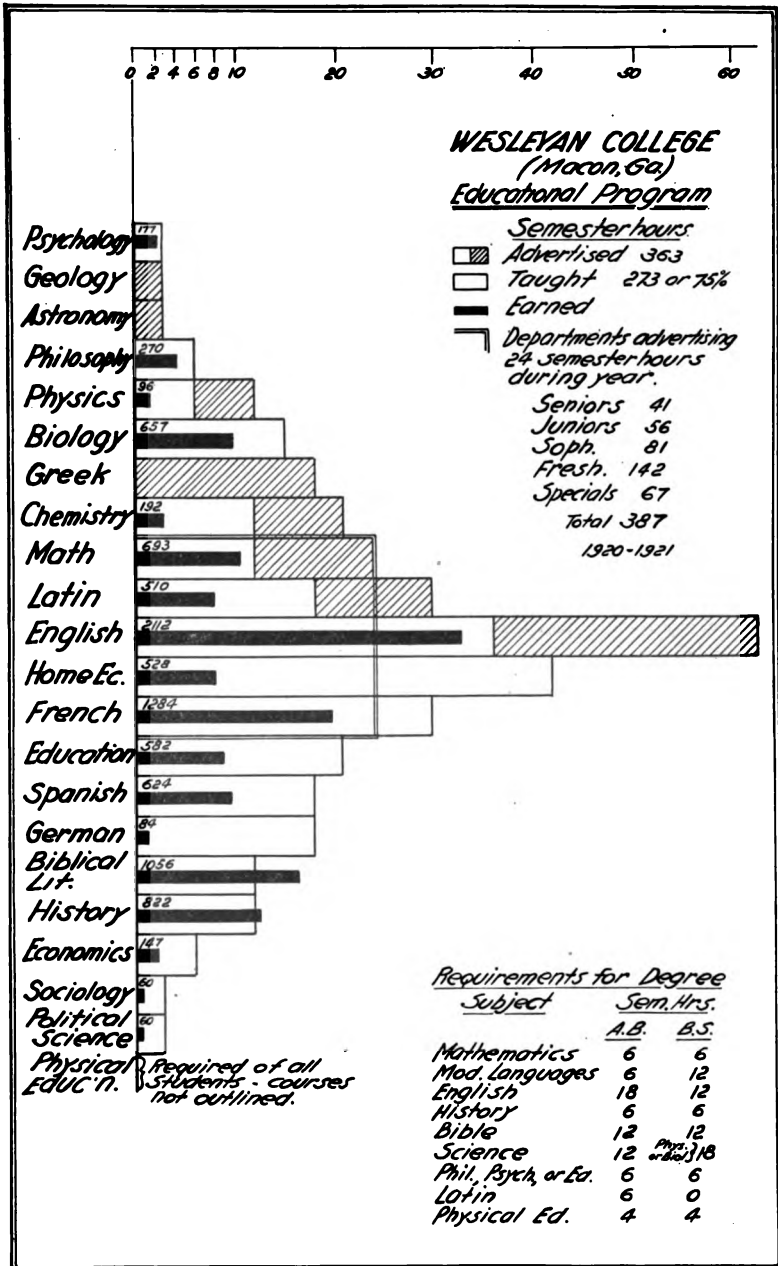


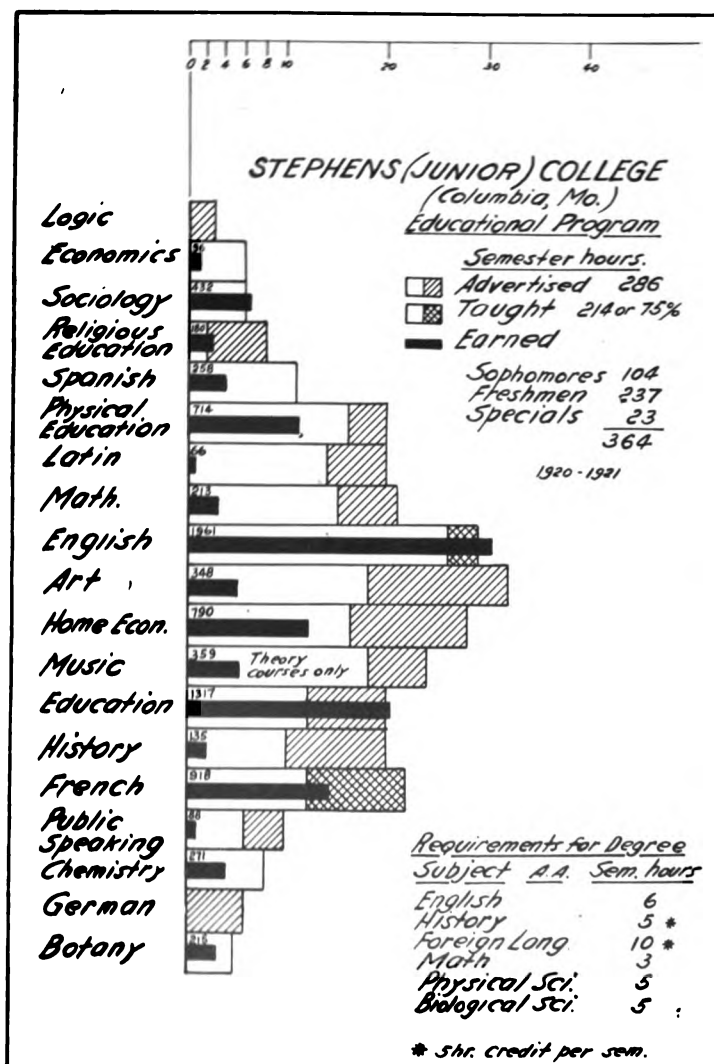


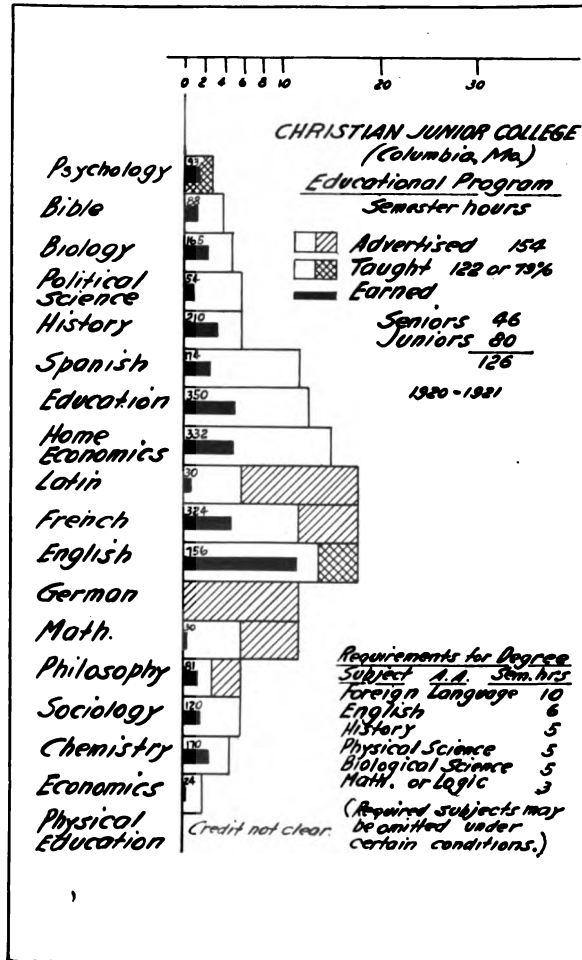


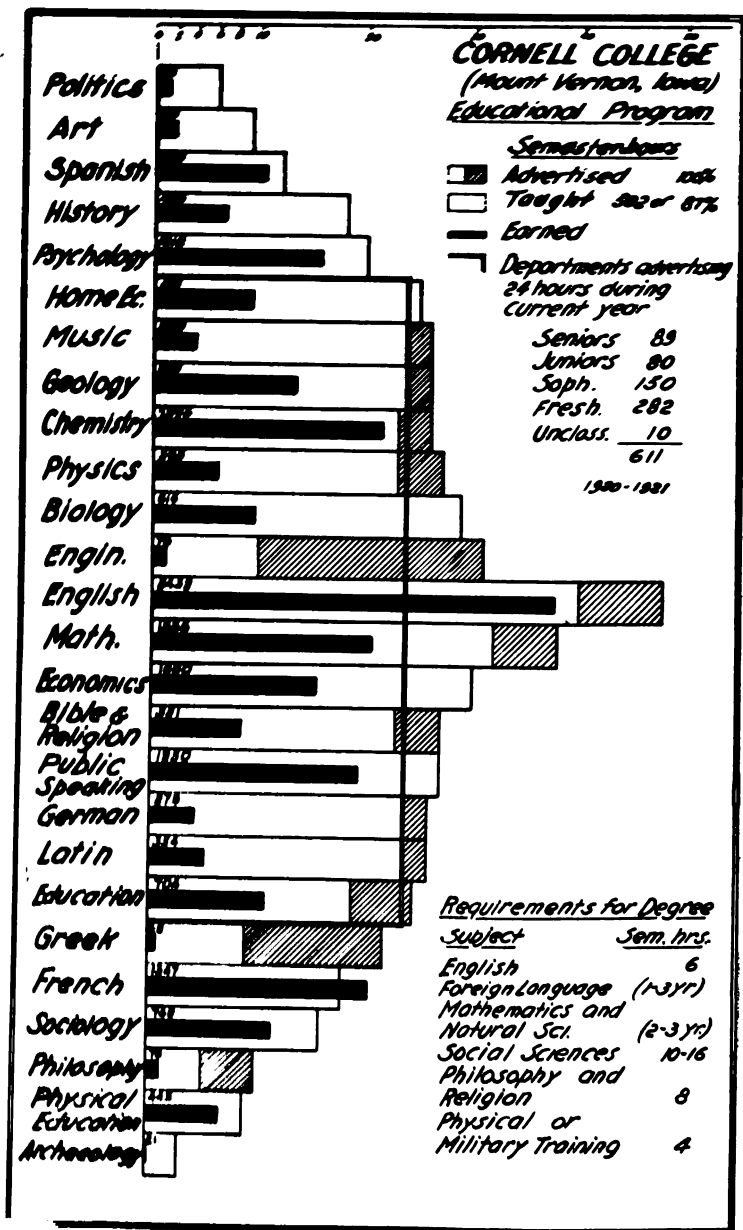


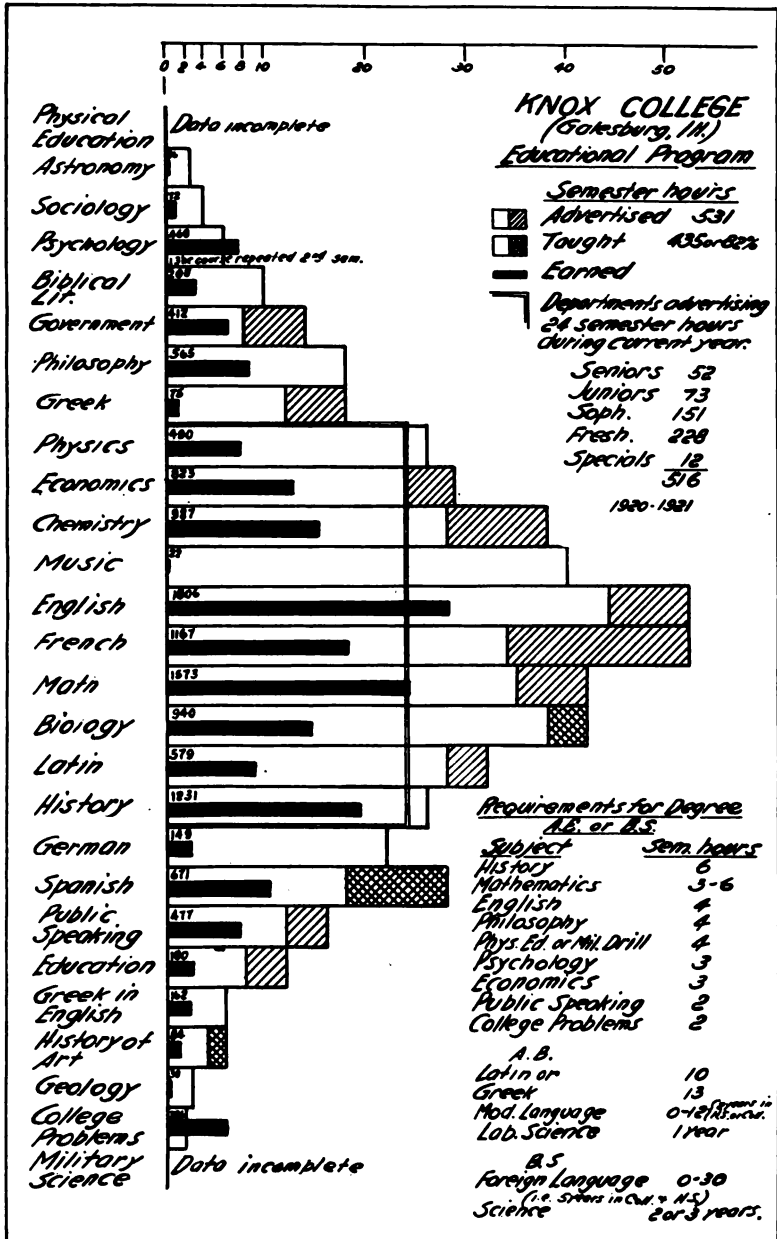












Physical Education
 Foreign Lit in English
 Philosophy
 Political Science
 Spanish
 Bible
 Economics
 German
 French
 Physics
 Latin
 History
 English
 Biology
 Chemistry
 Mathematics
 Education
 Criminology
 Public Speaking
 Government
 Agriculture
 Home Economics
 Art
 Music
 Physical Education
 Physical Education
 Physical Education
 Physical Education
 Physical Education

Physical Education
 2 years for 4 semesters
 1 year for 2 semesters

EARLHAM COLLEGE (Earlham, Ind.)

Educational Program

Semester hours

Advised 50T
 Taught 50T-82T
 Earned

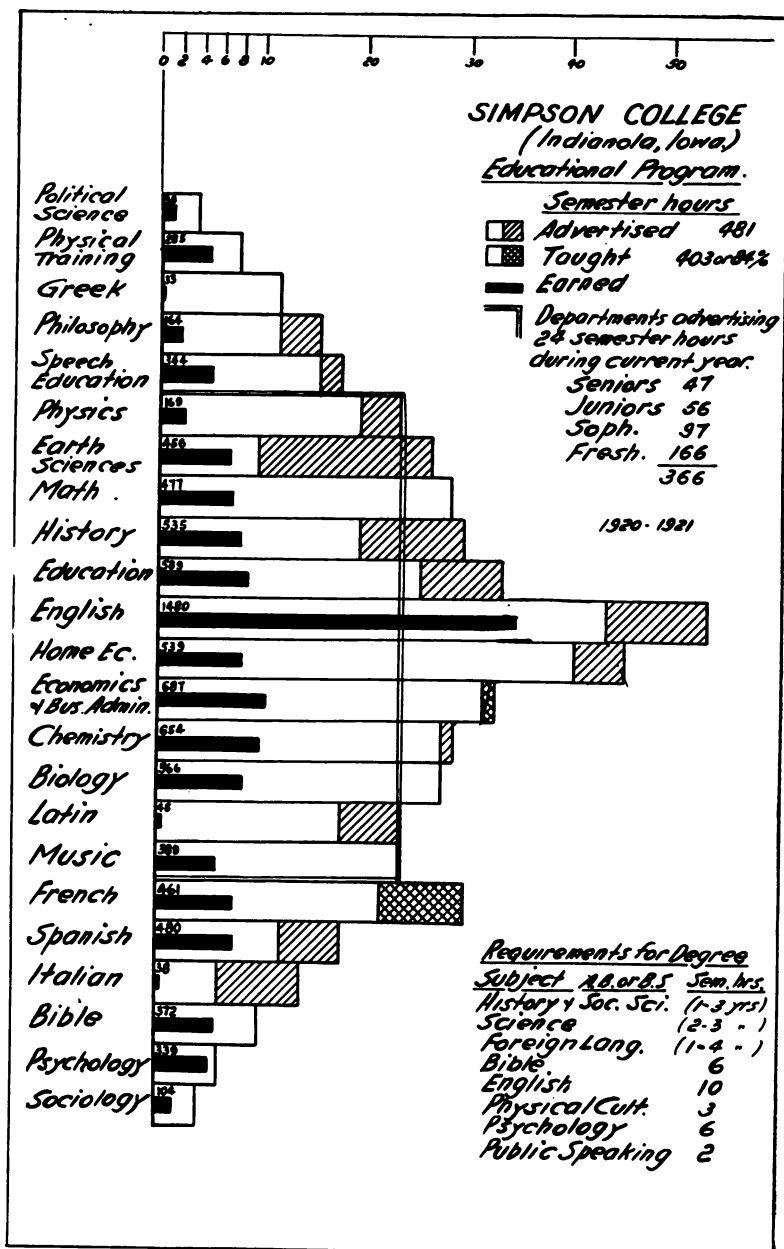
Departments advertising
 24 semester hours
 during current year

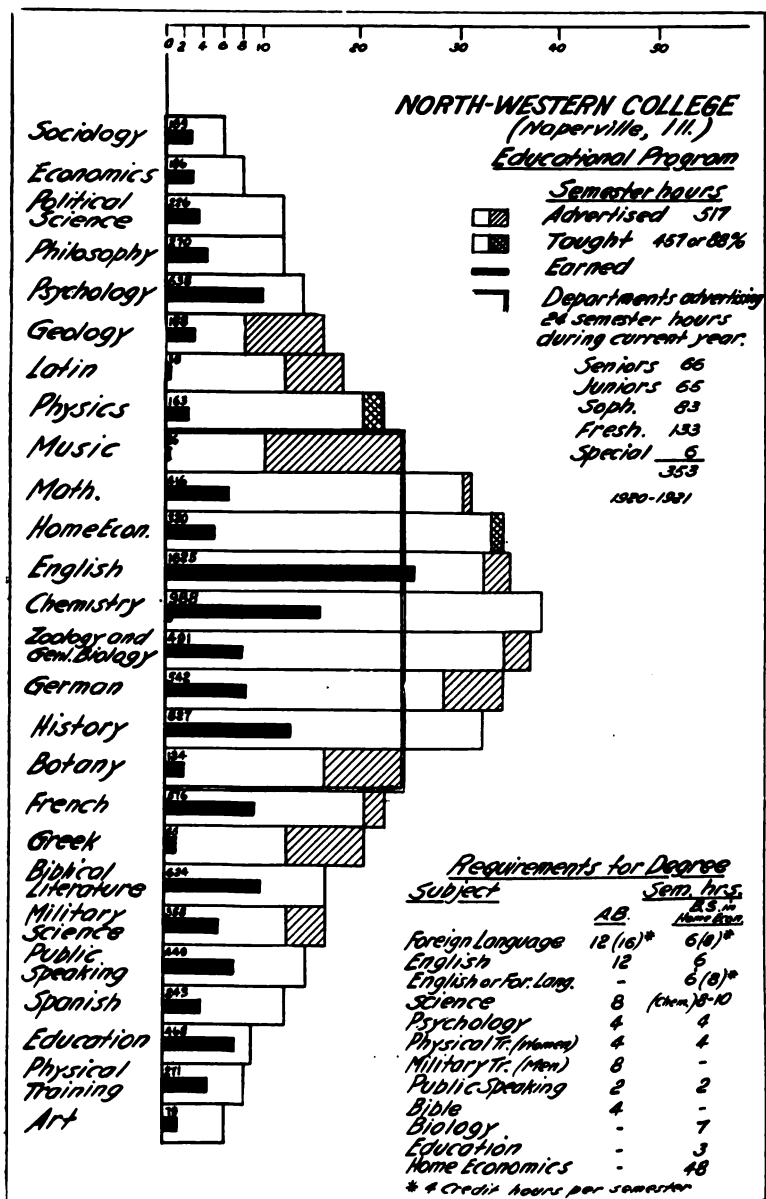
Seniors 62
 Juniors 51
 Soph. 121
 Fresh. 191
 Special 85
 500

1920-1921

Requirements for Degree (A.B. or B.S.)

Subject	Sem. hours
English	4
Physical Ed.	2 years





Art

Military

Science

History &

Relig. & M.

Biblical

Literature

Latin

Greek

Philosophy

Political

Science

Religion

Education

Education

Economics

Chemistry

Mathematics

English

History

Botany

Geology

Geography

French

Zoology

Psychology

Physiology

German

Sociology

Spanish

Astronomy

Physics

Hygiene

Italian

COLLEGE OF LIBERAL ARTS NORTHWESTERN UNIVERSITY

(Evanston, Illinois.)

Educational Program.

Semester hours

<input checked="" type="checkbox"/>	Advertised	1285
<input type="checkbox"/>	Taught	1189 or 93%
<input type="checkbox"/>	Earned	

Departments advertising
24 semester hours
during current year:

Seniors	258
Juniors	233
Soph.	581
Fresh.	752
Special	64

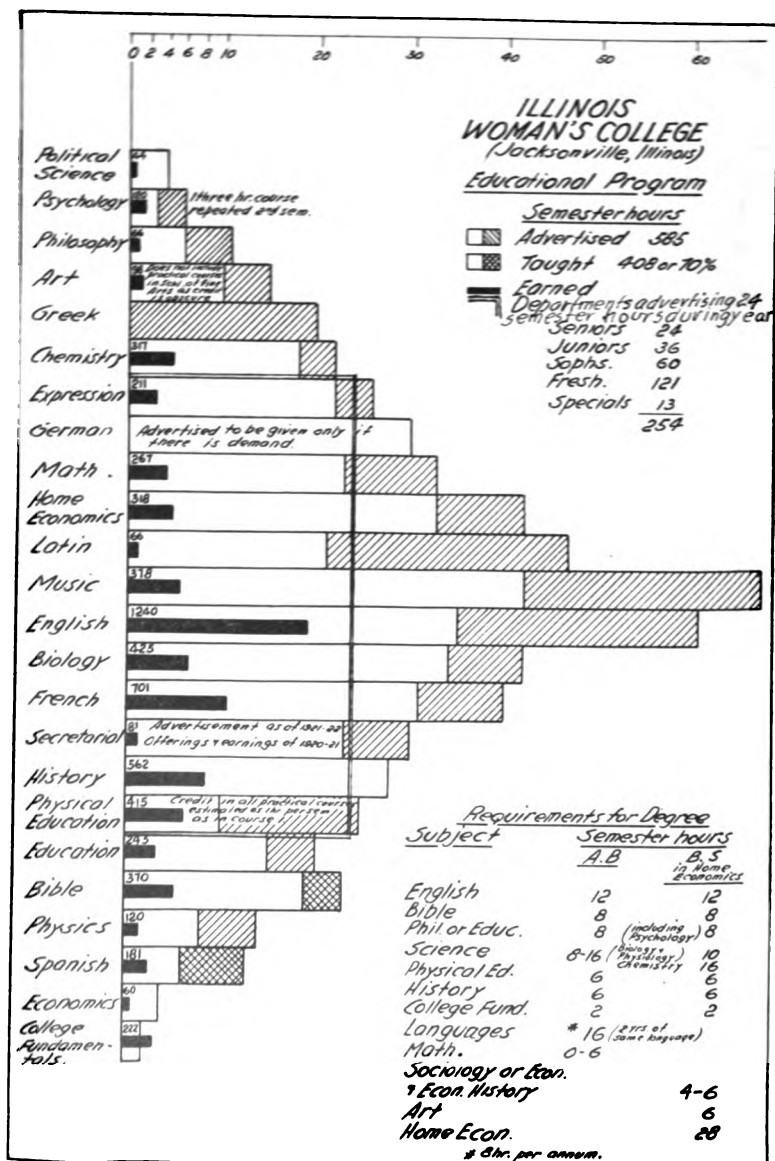
1896

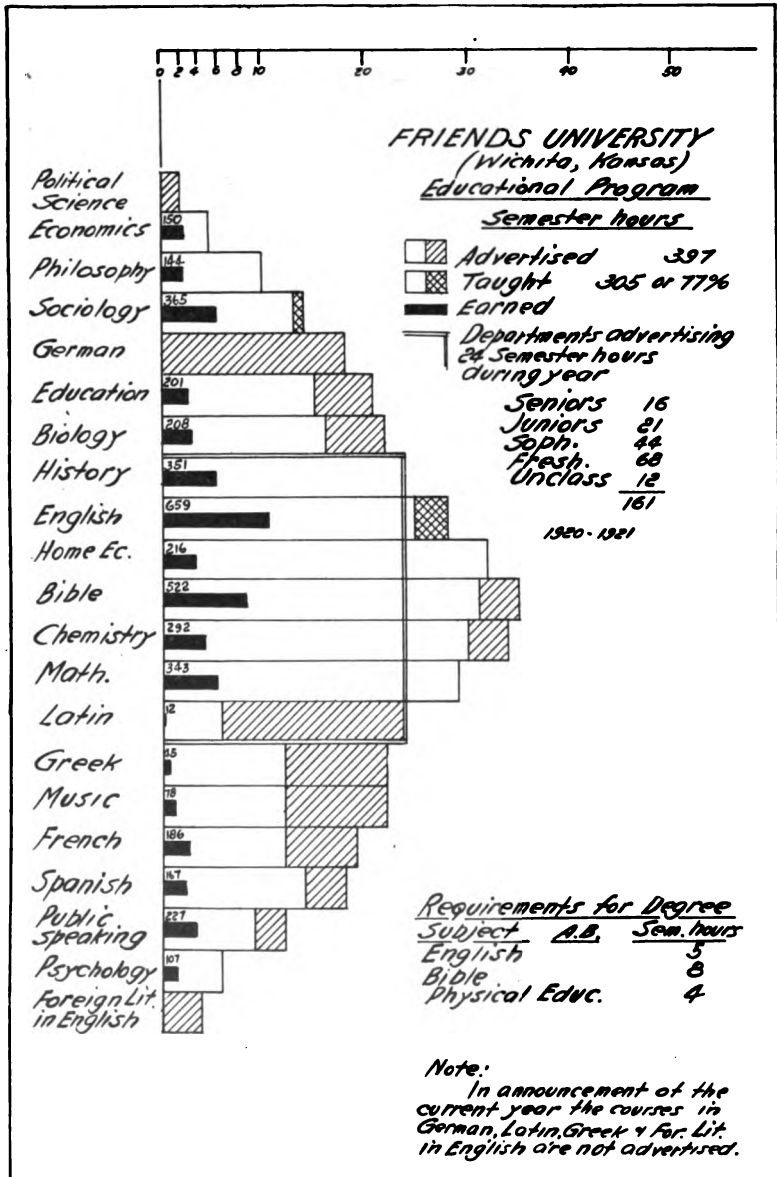
1920-1921

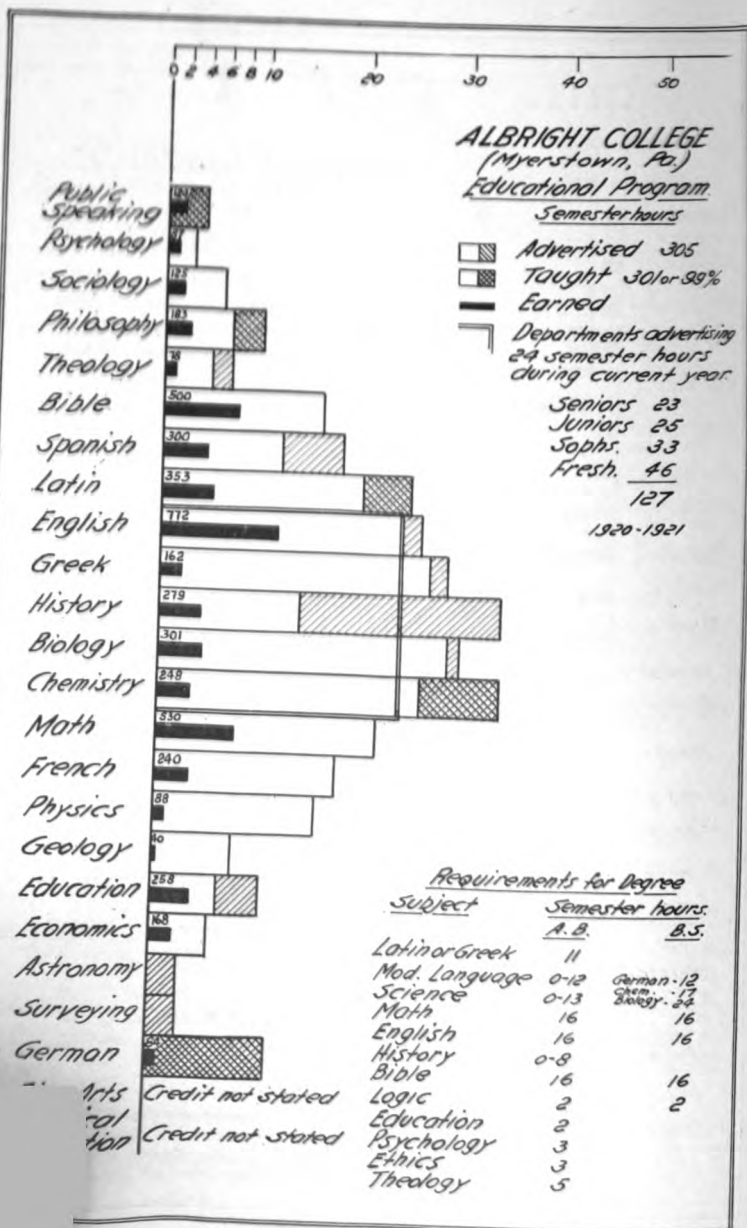
Requirements for Degree

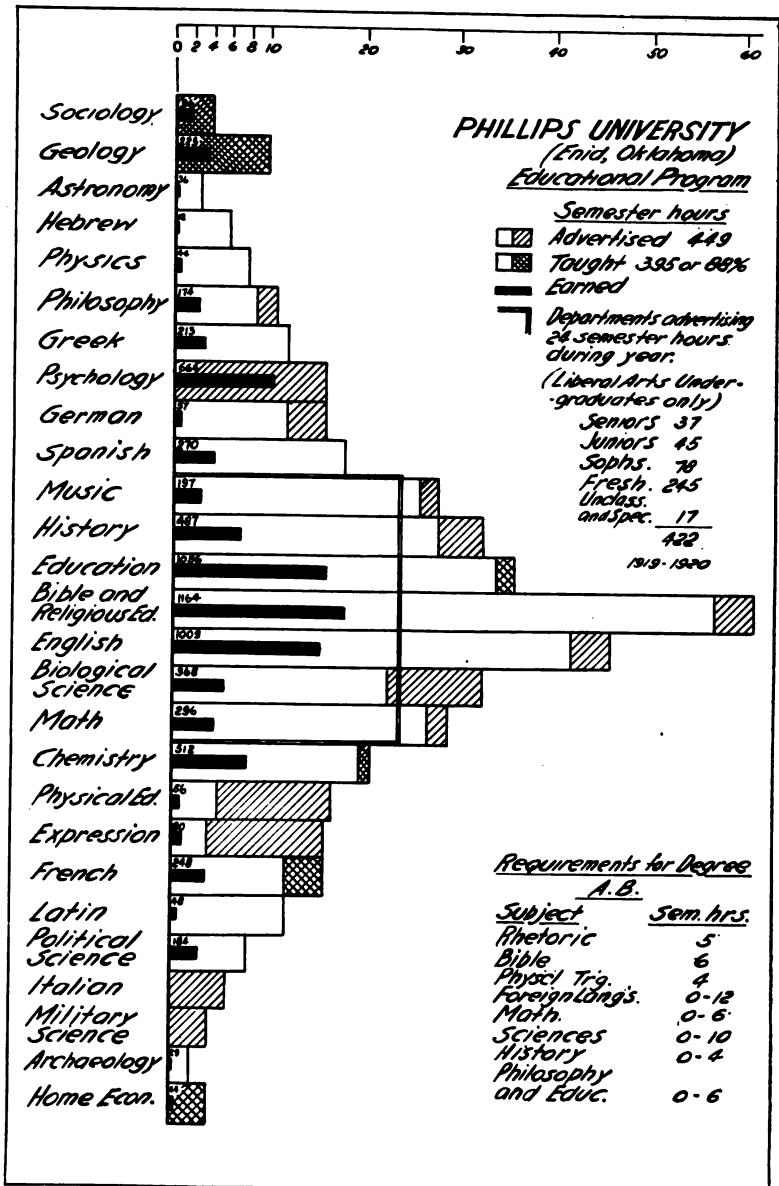
Subject	Sem. hrs.	
	A.B.	A.S.
English	10	10
Math or Greek	6	6 (Math) 1 yr.
Latin or Greek	6	-
(French, German		(French) 6
(Latin or Greek	6 (German) 6	
Science	1 yr	1 yr each of two
(Biblical Lit. Phil.		1 yr }
(Social Science etc.		
(Physical Ed. or		
Military Science	2 yr (each)	

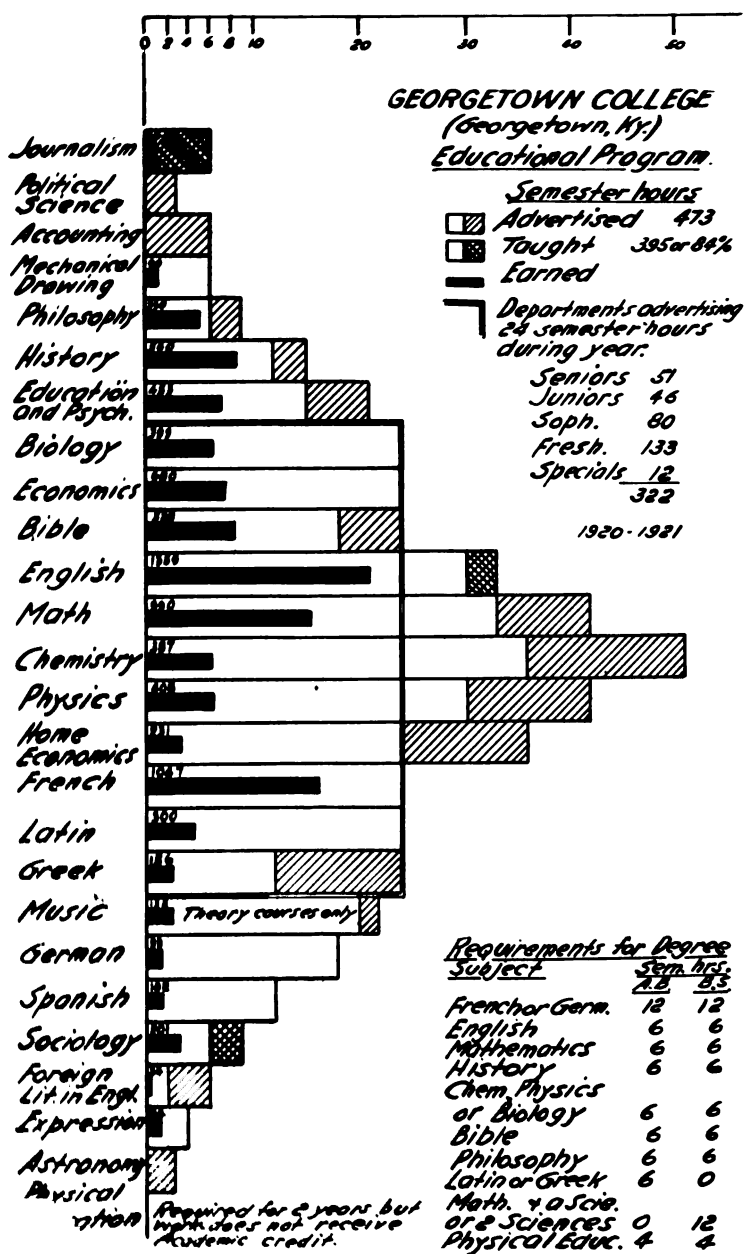


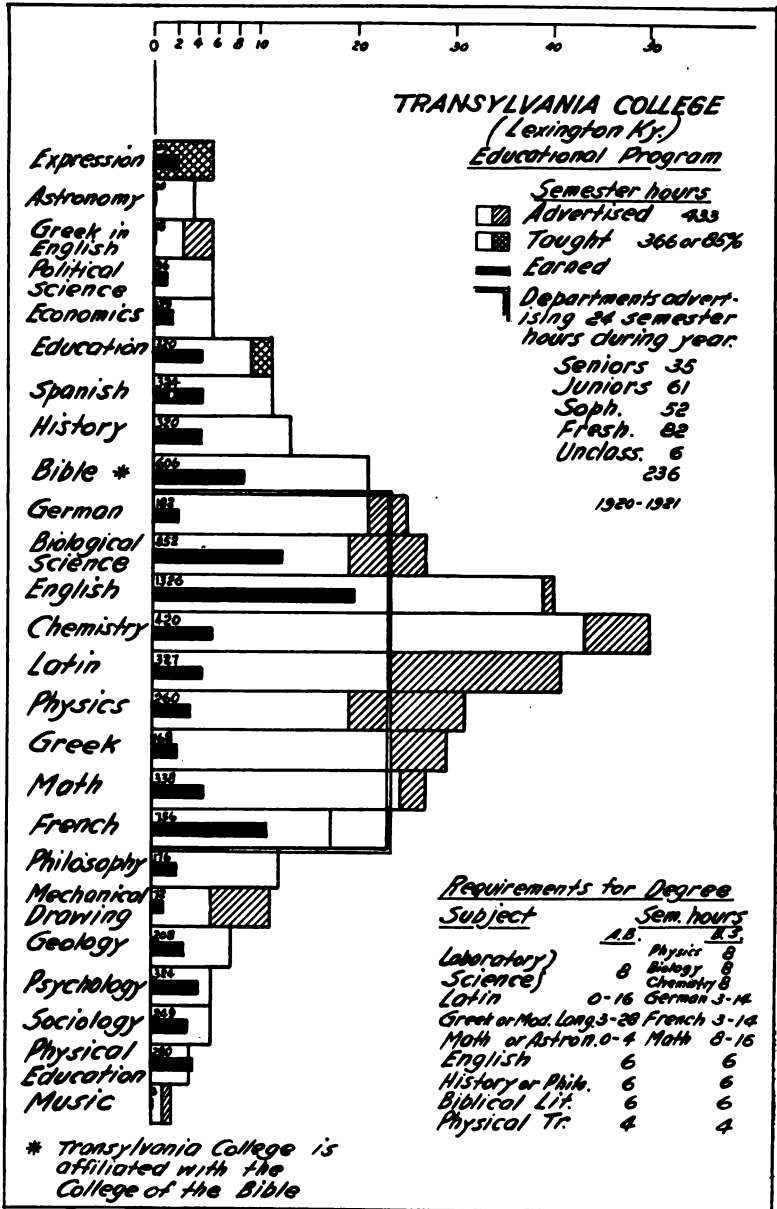












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